

**INVENTORY AND EVALUATION
OF SOLID WASTE DISPOSAL SITES**

**PROVISIONAL COUNTY OF HALIBURTON
AND
DISTRICT MUNICIPALITY OF MUSKOKA**

NOVEMBER, 1977



**Ministry
of the
Environment**

Ontario

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MINISTRY OF THE ENVIRONMENT
CENTRAL REGION

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This report is the second in a series that will document operating landfill sites in the Central Region, Ministry of the Environment. This study mainly comprises an inventory and field investigation of land disposal sites in the County of Haliburton and District Municipality of Muskoka. The site investigations were carried out by F.R. Campbell during the summer of 1975.

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SOLID WASTE DISPOSAL SITES
COUNTY OF HALIBURTON
AND
DISTRICT MUNICIPALITY OF MUSKOKA

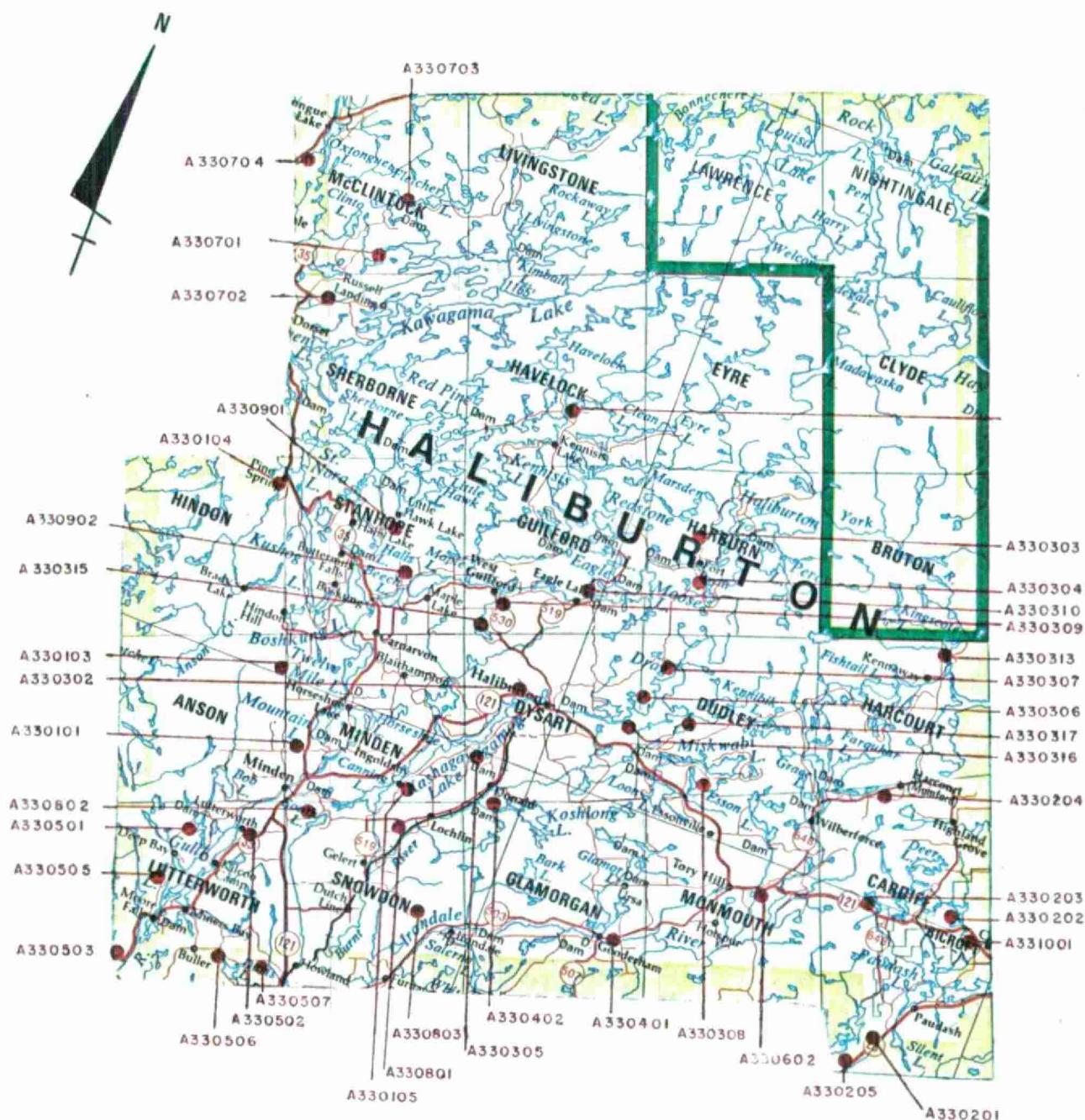
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PROVISIONAL COUNTY
OF
HALIBURTON



LEGEND

A330503 ●
Waste Disposal Site, Location
And Number



MINISTRY OF THE ENVIRONMENT
Central Region - Technical Support

LOCATION OF
WASTE DISPOSAL SITES

Scale
0 8

PROVISIONAL COUNTY OF HALIBURTON

FIGURE 1

Based on Ministry of Natural Resources MAP 21, 1974
Produced by: DS

SITE A330101

TOWNSHIP OF MINDEN

LOT 10, CONCESSION 4

A330101 TOWNSHIP OF MINDEN, CONCESSION 4, LOT 10

DATE OF SITE INSPECTION: May 20, 1976

INTRODUCTION

This site occupies about 20 acres of land of which about one acre is used for domestic garbage at an estimated rate of 2 tons per month from part of the combined Townships of Anson, Hindon and Minden (population 2,243). The site primarily serves a seasonal cottage population, therefore loadings are high during the summer, and light in the off-season.

No consultants report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located at the edge of a small land-locked swamp in a granite bedrock depression. The landfill operation basically consists of filling the wet area located at the toe of the fill. The overburden is limited so cover material is hauled to the site. No attempt is made to control the flows of surface water at the site, therefore, leachate and ponded water enter directly into the swamp. As a result, local surface waters are contaminated. The localized flow pattern probably consists of an upward component of groundwater flow at the site, it is doubtful that contaminants move outside the boundary of the site. It is expected that renovation of the waste waters would be complete in the biologically active swamp area.

SITE OPERATION

The site is operated by the Townships of Minden, Anson and Hindon. A modified semicircular ramp method is employed. At the time of the field inspection the site was clean, well covered and compacted. Because of the absence of cover material on site, clean sand is hauled to the site to cover the garbage. The dumping area is confined by the use of piles of fill restricting access to the dumping area. This restriction affectively limits the dumping area, and increases the efficiency of covering the garbage with a limited amount of sand. The only immediate problem at the site was the presence of a large volume of paper blown from the dumping area. This housekeeping problem could be rectified if increased frequency of cover is adopted.

CONCLUSIONS AND RECOMMENDATIONS

There are no problems with this site except for the nuisance of blowing paper and the movement of leachate when generated into a local swamp. Impairment of the quality of the swamp water will be limited because of the restricted size of the site. Flow of contaminants away from the site is restricted because of local hydrologic conditions and the natural renovation of the waste water in the swamp area. The site is remote from water users and is considered to have little or no impact on water quality.

Recommendations to be applied to the site would be the use of more frequent cover to reduce problems with blowing papers, and the better confinement of the dumping area through the use of portable fencing instead of fill. The face height should also be reduced to allow more efficient cover.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Minden

FILE NO.: A3301Q1

LOCATION (Lot, Con., Twp., County): Lot 10, Conc. 4, Township of Minden

OWNER (Name, Address, Phone No.): Township of Minden, Auson and Hinden

OPERATOR: R. Parisotto, Clerk

PHONE NO.: 705-286-1260

A) SITE DETAILS

AREA: 20 Acres	AREA FOR USE: 1 Acres	LIFETIME: 10 Years	DATE OPENED: 1971
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PRIOR LAND USE: open space FUTURE USE: nil

B) WASTES DISPOSED

QUANTITIES: 0.5 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open
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DOMESTIC: 100 %	COMMERCIAL: 0 %	INDUSTRIAL: 0 %	LIQUID: 0 %
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AGRICULTURAL: 0 %	HAZARDOUS: 0 %	HAULED SEWAGE: 0 %	OTHER (SPECIFY): 0 %
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Minden

POPULATION 2,240

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: No burning;

six inches of cover twice/month during April to November,
once/month during remainder of year

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, granite peneplain with sand infilling

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, variable thickness

BEDROCK - TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: good

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 1500 ft. plus	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: unknown ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW:north-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 20 ft.

NATURE, THICKNESS OF COVER MATERIAL: clean sand hauled to site and applied weekly

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified half-moon ramp, quite clean, well covered and compacted, clean sand hauled to the site, no cover material on site, dumping area is confined by the use of piles of fill restricting access to the dumping area limiting the face of the fill, blowing paper and sand only problem at site, needs increased cover.

J) CONCLUSIONS: no anticipated problems with this site except for blowing paper and the movement of any leachate formed into a local swamp. Small site won't produce much leachate - therefore affect on swamp limited. Renovation of leachate will take place in swamp. Site remote from water users - no problems, no samples.

K) RECOMMENDATIONS:

-more frequent cover to reduce leachate production and blowing paper

-confine dumping face with portable fencing

-reduce height of face for better cover

SITE A330104
TOWNSHIP OF HINDON
LOT 32, CONCESSION A

A330104 TOWNSHIP OF HINDON, LOT 32, CONCESSION A, HINDEN TOWNSHIP

DATE OF INSPECTION: July 11, 1975

INTRODUCTION

This site serves the combined Townships of Hindon, Anson and Minden (population 2243) on a 24 hour per day basis, and receives primarily domestic garbage at an estimated rate of 0.5 tons/week. The estimated lifetime is about two years. Lifts above the present site grade could be developed, subject to the availability of cover materials.

No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on flat lying beach or lake bottom sands deposited in a Precambrian granite knob and depression landscape. Vertical sections, 15 feet in thickness consisting of sand, silt and some clay are exposed at the site.

A swamp located at the toe of the fill is confined by the rough local topography. Poor drainage characteristics exist at the site, and the water table is exposed. There are no provisions for surface water control, suggesting a potential water quality problem at this site. However, the site is relatively remote and because of the rough topography, hydraulic continuity between the site and other surface water bodies is severely limited. The water quality and hydraulic continuity of bedrock aquifers in the vicinity of the site is unknown. The closest bedrock well to the site is about 1500 feet away. Renovation of leachate travelling this distance through fractured bedrock may be minimal, however, no data are available on water quality.

SITE OPERATION

The site is operated by the Township of Anson, Hindon and Minden. This landfill is operated in a circular ramp fashion with dumping taking place into the center of the circle. A five foot face has been built up. Sand cover, obtained on site is applied monthly. The site could go up at least one more lift if adequate cover was available.

CONCLUSIONS & RECOMMENDATIONS

Infilling the swamp in a circular fashion and covering the face with sand obtained from the bank at the edge of the site leads to a relatively neat and clean operation. More frequent cover is required to avoid scavenging by bears. Water is found at the base of the fill and it is possible that local groundwater quality is affected. The hydraulic connection of this contaminated water to other surface and groundwater supplies has not been established.

It is recommended that routine sampling of the swamp and nearest well be considered in order to anticipate potential contamination problems.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Hindon

FILE NO.: A330104

LOCATION (Lot, Con., Twp., County): Lot 32, Conc. A, Township of Hindon

OWNER (Name, Address, Phone No.): Township of Anson, Hindon and Minden

OPERATOR: R. Parisotto, Clerk

PHONE NO.: 705-286-1260

A) SITE DETAILS

AREA:	1 Acres	AREA FOR USE:	1 Acres	LIFETIME:	2 Years	DATE OPENED:	1971
PRIOR LAND USE:	sand pit		FUTURE USE:	nil			

B) WASTES DISPOSED

QUANTITIES:	0.5 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open			
DOMESTIC:	90 %	COMMERCIAL:	10 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0 %

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Hindon

POPULATION 2,240

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no burning
6" cover April to November, twice/month
6" cover remainder of year once/month

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying beach sands

SOIL, DRAINAGE: sandy loam, poor drainage

OVERBURDEN - TYPE, THICKNESS: sand, silt and some clay, approx. 15 feet

BEDROCK - TYPE, DEPTH: precambrian granite, knobs and depression

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: poor

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 1,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
	<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: north-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: sample swamp and nearby well

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 10 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand cover applied monthly

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: circular ramp with dumping taking place into the centre of the circle, five foot face built up with sand cover, locally obtained cover applied about monthly, site could go up one more lift if adequate cover was available

J) CONCLUSIONS: operation - neat and clean, adequate cover being applied, could be covered more frequently, swamp at toe is probably affected by leachate

K) RECOMMENDATIONS: -routine sampling of the nearest bedrock well

-sample swamp

-increased frequency of cover

SITE A330106

TOWNSHIP OF ANSON, HINDON AND MINDEN

LOT 20, CONCESSION 2

A330106 TOWNSHIP OF ANSON, HINDON & MINDEN, LOT 20,
CONCESSION 2 MINDEN TOWNSHIP

DATE OF INSPECTION, July 14, 1975.

INTRODUCTION

This nine acre site serves the combined Townships of Anson, Hindon and Minden (population 2243) and receives primarily domestic garbage at an estimated rate of one ton per week. The site is open 24 hours per day and is classified as a dump. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on flat-lying glacial fluvial deposits of sand and gravel, with good drainage characteristics. It is remote from surface waters being about 2500 feet from Lake Kashagawigomog. The cottages on this lake, utilize surface water and are the only nearby dwellings. Both ground and surface water gradients are from the site to the lake and there are no existing users in the area, the major concern would therefore be the quality of the lake water. No data is available to confirm the assumption that there is sufficient renovation and dilution of any leachate formed in movement to the lake.

SITE OPERATION

The site is operated by the Townships of Anson, Hindon and Minden, operated by a modified ramp method, the site is covered monthly by sand trucked in from a nearby sand pit. The lift is about four feet high with no excavation and burying of garbage having taken place.

CONCLUSIONS & RECOMMENDATIONS

The site is remote, well screened, and relatively clean although sufficient cover is not applied and garbage is not compacted. The site is flat lying with heavy bush lying between the site and water users. Housekeeping at the site is bad with some burning taking place, however, there is no apparent threat to ground or surface water.

It is recommended that the site be covered and compacted on a more frequent basis. During winter months at least monthly cover should be applied, while during the summer weekly or by-weekly applications of cover should be made. To make this operation efficient, the dumping area should be confined by portable fencing, limiting the dumping face to a width of about 40 feet, less cover material could then be used over a larger area of fill thereby extending the life of the site.



Ministry of the
Environment

-11-

LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Minden

FILE NO.: A330106

LOCATION (Lot, Con., Twp., County): Lot 18, Conc. I, Township of Minden

OWNER (Name, Address, Phone No.): Township of Anson, Hindon and Minden

OPERATOR: R. Parisotto, Clerk

PHONE NO.: 705-286-1260

A) SITE DETAILS

AREA: 9 Acres	AREA FOR USE: 2 1/2 Acres	LIFETIME: 6+ Years	DATE OPENED: 1974
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PRIOR LAND USE: gravel pit	FUTURE USE: reforestation
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B) WASTES DISPOSED

QUANTITIES: 3 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open
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DOMESTIC: 100%	COMMERCIAL: 0%	INDUSTRIAL: 0 %	LIQUID: 0 %
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AGRICULTURAL: 0%	HAZARDOUS: 0 %	HAULED SEWAGE: 0 %	OTHER (SPECIFY): 0 %
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Minden

POPULATION 2,240

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: _____

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS: _____

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying glacial fluvial deposits

SOIL, DRAINAGE: sandy loam, excellent drainage

OVERBURDEN - TYPE, THICKNESS: sand and gravel

BEDROCK - TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: good

NEAREST WATERCOURSE: 1,000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 2,500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE:	10 ft.	<input type="checkbox"/> CONFINED	<input type="checkbox"/> UNCONFINED
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DEPTH TO BEDROCK AQUIFER AND TYPE:	ft.	<input type="checkbox"/> CONFINED	<input type="checkbox"/> UNCONFINED
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NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: north-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 3 ft.

NATURE, THICKNESS OF COVER MATERIAL: clean sand, covered monthly

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified ramp method, covered monthly by clean sand which is trucked to the site from a nearby sand pit, the lift is about 4 feet high with no excavation and burying of garbage having taken place.

J) CONCLUSIONS: the site is remote, well screened and relatively clean but uncovered and not compacted, could be operated better, site is flat lying with heavy brush lying between the site and users which are of a sufficient distance away that renovation of the leachate will be complete long before the residents are reached, i.e. no water threat

K) RECOMMENDATIONS:

- no sampling program needed
- site should be covered and compacted on a more frequent basis
- during winter months at least monthly cover should be applied
- during the summer, weekly or at least alternate weekly applications of cover should be made
- use portable fencing to make coverage efficient and to extend the life of the site

SITE A330203
TOWNSHIP OF CARDIFF
LOT 8, CONCESSION 13

A330203 TOWNSHIP OF CARDIFF, LOT 8, CONCESSION 13, TOWNSHIP OF CARDIFF

DATE OF SITE INSPECTION: July 18, 1975.

INTRODUCTION

This five acre site serves part of the Township of Cardiff (Population 450) on a 24 hour per day basis receiving domestic garbage at an estimated rate of 0.5 tons per week. Operated on a modified ramp method, the dump was an unsightly mess of uncovered garbage scattered over an area approximately 35 x 150 feet. No consultant's report or plan exists for the site which was closed in October, 1975.

HYDROGEOLOGY

Located on rolling land comprising a Precambrian peneplain with glacial lacustrine sediments infilling the depressions. The sand and gravel parent material has given rise to the development of sandy loam soils of variable composition. Drainage characteristics of the site are fair to good, there is, however, no provision at the site for surface water control. The closest body of surface water to the site is Colborne Lake located approximately 2500 feet from the property. The nearest groundwater user is over 5000 feet away.

SITE OPERATION

Located in an old sand-gravel pit, dumping of garbage has taken place over the edge of a small two-foot embankment in a random fashion. No attempt to cover, compact or confine the dumping face was evident at the time of the site inspection.

CONCLUSIONS & RECOMMENDATIONS

Although the site is remote and of apparently no consequence to present water users, the operation is unsatisfactory and should be upgraded. It is recommended that the dumping area be restricted, and that compacting and covering of the garbage be undertaken on a bi-weekly basis.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Cardiff

FILE NO.: A330203

LOCATION (Lot, Con., Twp., County): Lot 8, Conc. 13, Township of Cardiff

OWNER (Name, Address, Phone No.): Township of Cardiff, R. R. #3, Bancroft

OPERATOR: M. J. McBride, Clerk

PHONE NO.: 613-339-2323

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	0.5 Acres	LIFETIME:	indef. Years	DATE OPENED:	1971
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PRIOR LAND USE: FUTURE USE:

B) WASTES DISPOSED

QUANTITIES:	0.5 Tons/Wk	0	Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	100%	COMMERCIAL:	0%	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0 %
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Cardiff

POPULATION 450

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

site closed October/75

CONDITIONS OF APPROVAL: site closed October/75

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, glacial lacustrine sediment infilling peneplain

SOIL, DRAINAGE: sandy loam, fair to good drainage

OVERBURDEN - TYPE, THICKNESS: sand and gravel, variable thickness

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Colborne Lake, good drainage

NEAREST WATERCOURSE: 2,500 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	5,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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	<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 10t. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: north-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: ft.

NATURE, THICKNESS OF COVER MATERIAL: none

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site located in an old sand-gravel pit dumping of garbage has taken place over the edge of a small 2-foot embankment in a relatively random fashion no attempts to cover, compact or confine the dumping face evident

J) CONCLUSIONS: site remote and of no consequence to present water users, site could be used if upgraded by restricting the dumping area, compacting and covering on a bi-weekly basis.

K) RECOMMENDATIONS:

-proper final cover should be applied

SITE A330204
TOWNSHIP OF CARDIFF
LOT 11, CONCESSION 22

A330204 TOWNSHIP OF CARDIFF, LOT 11, CONCESSION 22, TOWNSHIP OF CARDIFF

DATE OF SITE INSPECTION: July 17, 1975

INTRODUCTION

This five acre site serves part of the Townships of Cardiff and Dudley (population 450) on a 24 hour per day basis receiving domestic garbage at an estimated rate of 200 lbs. per day. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Located on flat to rolling land with sandy lacustrine sediments infilling a knobby Precabrian peneplain, the site has a shallow sandy loam soil overlying Precambrian granites and gneisses. Drainage characteristics of the site are fair to good with no provisions at the site for surface water control. The closest body of surface water to the site is Cardiff Lake, located approximately 5000 feet from the site. The site is remote with respect to groundwaters users, being approximately 4000 feet from the small community of Mumford. It appears that the water quality locally has not been effected by the operation, however, this conclusion has not been verified by a water sampling program.

SITE OPERATION

Operated on a modified ramp basis, the garbage is not buried, but deposited in a series of roughly parallel five foot lifts. Sandy material is applied to cover the refuse on an approximately bi-weekly basis.

CONCLUSIONS & RECOMMENDATIONS

The site is remote and small with no impact on present water users. With an attendant full time at the site and cover being applied on a bi-weekly basis, the site was clean, covered and compacted sufficiently. Burning of garbage takes place and should be discouraged. There are no water quality problems at the site and no smapling is required.

However, it is recommended that significant alterations in the operation of the site be made. A second lift in front of the present face should be developed to provided the opportunity for efficient and effective coverage of the garbage. The dumping face should be restricted to a width of forty feet.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Cardiff

FILE NO.: A330204

LOCATION (Lot, Con., Twp., County): Lot 11, Conc. 22, Township of Cardiff

OWNER (Name, Address, Phone No.): Township of Cardiff, R.R. #3, Bancroft

OPERATOR: M. J. McBride, Clerk

PHONE NO.: 613-339-2323

A) SITE DETAILS

AREA: 5 Acres AREA FOR USE: 0.5 Acres LIFETIME: indef. Years DATE OPENED: 1971

PRIOR LAND USE: brush FUTURE USE: brush

B) WASTES DISPOSED

QUANTITIES: 0.5 Tons/Wk 0 Gallons/Wk DISPOSAL PERIOD: always open

DOMESTIC: 100% COMMERCIAL: 0% INDUSTRIAL: 0% LIQUID: 0%

AGRICULTURAL: 0% HAZARDOUS: 0% HAULED SEWAGE: 0% OTHER (SPECIFY): 0%

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Cardiff

POPULATION 450

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no burning

cover twice/month, May to November

cover once/month, remainder of year

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat to rolling land, sandy lacustrine sediments infilling a knobby granite peneplain.

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, gravel, variable thickness

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Cardiff Lake, fair drainage

NEAREST WATERCOURSE: 5,000 ft.

F) HYDROLOGY - GROUNDWATER: NEAREST WELL: 3,000 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M. BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 12 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: north-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: ft.

NATURE, THICKNESS OF COVER MATERIAL: sandy material applied about bi-weekly

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: operated on a modified ramp basis, garbage not buried but deposited in a series of roughly parallel five-foot lifts, sandy cover applied approximately bi-weekly, series of lifts later abandoned in favour of one lift with a face about 15 feet high - face is impossible to cover

J) CONCLUSIONS: -site is remote, small and apparently of no consequence to present water users
-burning of garbage has taken place at the site, no water sampling need be done at the site
-the face presently is too high and long to be efficiently covered

K) RECOMMENDATIONS:

-site needs significant upgrading; a second lift in front of the present face should be developed to provide the opportunity for efficient and effective coverage of the garbage
-site should be covered and compacted on a more frequent basis
-during summer, weekly or at least alternate weekly applications of cover should be made
-use portable fencing to make coverage efficient and to extend the life of the site

SITE A330205
TOWNSHIP OF CARDIFF
LOT 5, CONCESSION 1

A330205 TOWNSHIP OF CARDIFF, LOT 5, CONCESSION 1, TOWNSHIP OF CARDIFF

DATE OF SITE INSPECTION: July 17, 1975

INTRODUCTION

This three acre site serves part of the Township of Cardiff, (population 450) and cottagers on Highway #28 south. It receives 90% domestic wastes and 10% brush and metals at an estimated rate of one ton per week. This site, is a modified dump with attempts to cover the site on a bi-weekly basis. No consultants report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is flat and located on a sand plain. The overburden is composed of sand deposits of undetermined and variable thickness. Underlying the site are Precambrian granites and gneisses.

Drainage characteristics at the site are fair to poor with part of the site being wet most of the year. Leachate was seen to be ponded at the toe of the landfill in a wet area indicating high water table conditions.

The site, is relatively remote, being approximately 500 feet from Eel's Lake and at an equal distance from the nearest dwelling. This factor combined with the fair renovative capacity of the overburden materials suggest minimal impact of the site on water resources. This inference is not supported by water sampling.

SITE OPERATION

Sand is hauled to this modified ramp operation for cover on a bi-weekly basis. Occasional burning takes place at the site. The garbage and cover extend about five feet above grade. Garbage is well segregated and well covered but scavanging by bears still appears to be a problem.

CONCLUSIONS AND RECOMMENDATIONS

The site is remote, clean, well covered and well maintained. There are no apparent or potential ground water or surface water problems except for the ponded leachate on site. By reducing the dumping face with portable fencing, more effective use of cover material could be achieved and the life of the site could be extended.



Ministry of the
Environment

LANDFILL SITE DATA SUMMARY

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SITE NAME: Township of Cardiff

FILE NO.: A330205

LOCATION (Lot, Con., Twp., County): Lot 5, Conc. I, Township of Cardiff

OWNER (Name, Address, Phone No.): Township of Cardiff, R.R. #3, Bancroft

OPERATOR: M. J. McBride, Clerk

PHONE NO.: 613-339-2323

A) SITE DETAILS

AREA:	3 Acres	AREA FOR USE:	0.5 Acres	LIFETIME:	10 Years	DATE OPENED:	1971
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PRIOR LAND USE: brush FUTURE USE: brush

B) WASTES DISPOSED

QUANTITIES:	1 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open				
DOMESTIC:	90 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY): 10%	

brush and metals

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Cardiff

POPULATION 450

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: waste covered twice/month, May to November

waste covered once/month, December to April

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying sand plain

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, undetermined and variable thickness

BEDROCK -- TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Eel's Lake, fair drainage

NEAREST WATERCOURSE: 1,350 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	5,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	SAMPLING IN VICINITY:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
CHEMICAL ANALYSIS AVAILABLE:			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
BACKGROUND GROUNDWATER QUALITY:	good				
LOCAL GROUNDWATER QUALITY:	unknown				
SAMPLING PROGRAM RECOMMENDATIONS:	none				

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 6 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, limited applications (2 weeks)

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: sand is hauled to this modified ramp operation for cover on a 2 week basis, no excavation and burning is taking place at the site, garbage and cover extend about five feet above grade, garbage well segregated and well covered, no burning apparently takes place at this site, high water table with toe of garbage saturated, leachate evident.

J) CONCLUSIONS: site is remote, clean, well covered and well maintained, no apparent or potential ground water or surface water problems at the site, except for ponded leachate on site.

K) RECOMMENDATIONS:

-reduce the length of the dumping face with portable fencing to facilitate a more effective use of cover material and extend the life of the site

SITE A330302

TOWNSHIP OF DYSART

LOT 12, CONCESSION 9

A330302 TOWNSHIP OF DYSART, LOT 12, CONCESSION 9, TOWNSHIP OF DYSART

DATE OF SITE INSPECTION: July 21, 1975

INTRODUCTION

This 9.5 acre site serves the Township of Dysart and the Town of Haliburton (population 2000) on a 24-hour per day basis, receiving primarily domestic garbage at an estimated rate of one ton per day. This dump is operated in a circular ramp fashion with dumping taking place on the outside of the circle. The site can be expanded but the limiting factor seems to be the lack of adequate cover material. Burning at the site has been a problem in the past. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on flat lying shallow beach sands deposited in a Precambrian granite knob and depression landscape. These deposits are inundated by a local swamp and no overburden materials are exposed or mined at the site. The swamp that is located at the toe of the fill is confined by the rough local topography. Drainage is poor and the water table is near or at the surface. There is no provision for surface water control. However, there appears to be a lack of hydraulic continuity between the site and surface water bodies, therefore, a minimal impact on water resources is expected.

The site is relatively remote, being approximately 4000 feet from the nearest dwelling.

SITE OPERATION

Sand is hauled to this modified ramp operation for cover on a bi-weekly basis. With a 5 foot by 200 foot face, the cover operation is virtually impossible. The unsuccessful cover operation is supplemented by an extensive burning program to reduce the bulk of the garbage. As a result the site is a mess with extensive amounts of uncovered burnt or burning garbage. There is little hope for improvement under the present operating methods.

CONCLUSIONS AND RECOMMENDATIONS

This site with its extensive amount of uncovered garbage will continue to be a problem aesthetically, if not environmentally unless its mode of operation is upgraded. By severely reducing the dumping area with portable fencing such as snow fencing the operation can be changed into a more manageable ramp - lift operation. By reducing the face to about 40 feet x 5 feet, it could be effectively covered on a daily basis. Burning would no longer be necessary and the smoke and rodent problems would be reduced.

With the toe or the fill in the swamp, a confined surface water problem does exist. The site is remote, therefore, groundwater users should not be affected by water quality problems.

With confining, compaction and daily cover along with better segregation of the wastes, the site could be satisfactorily upgraded.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Dysart

FILE NO.: A330302

LOCATION (Lot, Con., Twp., County): Lot 12, Conc. 9, Township of Dysart

OWNER (Name, Address, Phone No.): Dysart, Bruton, Clyde, Dudley, Eyre, Guilford, Harbura, Harcourt

Havelock

OPERATOR: W.B. Wood, Clerk, Box 389, Haliburton

PHONE NO.: 705-457-1740

A) SITE DETAILS

AREA:	9.5 Acres	AREA FOR USE:	1 Acres	LIFETIME:	10 Years	DATE OPENED:	1971
PRIOR LAND USE:	brush	FUTURE USE:	dump				

B) WASTES DISPOSED

QUANTITIES:	5 Tons/Wk	0	Gallons/Wk	DISPOSAL PERIOD: always open			
DOMESTIC:	95 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	5%

brush and metals

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Dysart

POPULATION 2,000

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:
	<input checked="" type="checkbox"/> NO	

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: waste covered twice/month during summer

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat, shallow beach sands infilling granite depression

SOIL, DRAINAGE: sandy loam and muck, fair to poor drainage

OVERBURDEN - TYPE, THICKNESS: sand with some gravel

BEDROCK - TYPE, DEPTH: precambrian granites and greisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to local swamp, poor drainage

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 2 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, hauled to site, used bi-weekly

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: sand is hauled to this modified ramp operation for cover on a bi-weekly basis, face is 5 feet by 200 feet and virtually impossible to cover, extensive burning practised to reduce bulk of garbage - large volume of uncovered, burnt or burning garbage, toe of fill is in a swamp

J) CONCLUSIONS: large volume of uncovered garbage at site is unacceptable as is burning of domestic garbage; present operational procedures with long face is unacceptable, toe of fill in swamp so leachate migrates to swamp, therefore a confined surface water problem exists; site is remote from well users, thus well water contamination is unlikely

K) RECOMMENDATIONS:

-the dumping area should be severely reduced with portable fencing such as snow fencing to change the operation to a more manageable ramp-lift operation, the face should be reduced to about 40 feet by 5 feet, permitting effective daily cover, burning should be discontinued

SITE A330303

TOWNSHIP OF HARBURN

LOT 11, CONCESSION 8

**SITE A330304
TOWNSHIP OF HARBURN
LOT 11, CONCESSION 5**

A-330303 TOWNSHIP OF HARBURN, CONCESSION 8, LOT 11
A-330304 TOWNSHIP OF HARBURN, CONCESSION 5, LOT 11

DATE OF SITE INSPECTION: May 26, 1976

INTRODUCTION

These sites occupy 2.5 acres and 4 acres of land respectively and are used to landfill domestic garbage over a 1 acre portion of the property at an estimated rate of 3 tons per week. The sites primarily serve a seasonal cottage population from part of the former Township of Harburn. (population 400)

No consultant's report or plan exists for the sites which have received a provisional certificate of approval.

HYDROGEOLOGY

The sites are located at the edge of a small land-locked swamp in a granite bedrock depression. The operation consists of basically filling the wet areas which are located at the toe of the fill. There is no soil or overburden of any extent at the sites and cover material is hauled to the site. No attempt is made to control the flow of surface water at the sites therefore leachate and surface runoff enter directly into the swamp. As a result of the operation of the sites in this manner, local surface waters are contaminated. However, because of a localized flow pattern with a probable upward component of groundwater flow it appears unlikely that any contaminants flow beyond the site boundary. Renovation of waste waters shall be reasonably complete in the biologically active swampy area. Further, the sites are remote and while no actual water samples have been collected and analyzed, it appears that no water quality problems exist for local water resource users as a result of the operation of there sites.

SITE OPERATION

The sites are operated by a modified semi-circular ramp method. The operation is clean and at the time of the field inspection were well covered and compacted. Because of the absence of cover material at the sites, clean sand is hauled to the sites to cover the garbage. The dumping area is confined by the use of a fence restricting access to the dumping area. This restriction affectively limits the dumping area, increasing the efficiency of covering the garbage with a limited amount of sand. The only immediate problem at the sites was the presence of a large volume of paper blown from the actual dumping area. This housekeeping problem should be rectified and increased frequency of cover should be adopted. Also consideration might be given to restricting dumping times. At present, there is no gate at the sites.

CONCLUSIONS AND RECOMMENDATIONS

There are no anticipated problems with these sites except for the blowing paper and the movement of any leachate formed into a local swamp. Impairment of the quality of the swamp will be limited because of the restricted size of the sites. Flow of contaminants away from the sites will be restricted because of local hydrogeologic conditions. The sites are remote from water users and should have no effect on water quality.

The only recommendation to be applied to these sites would be the use of more frequent cover to reduce problems with blowing paper.



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Harburn

FILE NO.: A330303

LOCATION (Lot, Con., Twp., County): Lot 11, Conc. 8, Township of Harburn

OWNER (Name, Address, Phone No.): Township of Harburn, Dysart, Bruton, Clyde, Dudley, Eyre, Guilfor

OPERATOR: W.B. Wood, Clerk, Box 389, Haliburton

PHONE NO.: 705-457-1740 Harcourt & Havelo

A) SITE DETAILS

AREA:	2.5 Acres	AREA FOR USE:	1 Acres	LIFETIME:	10 Years	DATE OPENED:	1971
PRIOR LAND USE:	brush			FUTURE USE:	dump		

B) WASTES DISPOSED

QUANTITIES:	3 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open				
DOMESTIC:	100 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY): 0%	

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Harburn

POPULATION 400

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, granite peneplan with sand infilling

SOIL, DRAINAGE: no soil of any extent on site

OVERBURDEN - TYPE, THICKNESS: no overburden of any extent on site

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses at surface

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to small land-locked swamp at toe of fill

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	10,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: unknown

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, adequate thickness

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified half-moon ramp method. It is quite clean and at the time of the field inspection it was well covered and compacted, absence of cover material at the site so clean sand is hauled to the site to cover the garbage, the dumping area is restricted by the use of a fence to limit the spread of garbage.

J) CONCLUSIONS: No anticipated problems with this site except for the blowing paper and the movement of any leachate formed into a local swamp. Impairment of the quality of the swamp will be limited because of the restricted size of the site, flow from swamp limited - land-locked, site remote from water users, no sampling needed.

K) RECOMMENDATIONS:

-more frequent cover needed to reduce problems with blowing paper



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Harburn

FILE NO.: A330304

LOCATION (Lot, Con., Twp., County): Lot 11, Conc. 5, Township of Harburn

OWNER (Name, Address, Phone No.): Harburn et al, Box 389, Haliburton

OPERATOR: W. B. Wood, Clerk

PHONE NO.: 705-457-1740

A) SITE DETAILS

AREA:	4 Acres	AREA FOR USE:	1 Acres	LIFETIME:	10 Years	DATE OPENED:	1971
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PRIOR LAND USE:	brush	FUTURE USE:	brush
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B) WASTES DISPOSED

QUANTITIES:	3 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	80 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	5 %	HAZARDOUS:	5 %	HAULED SEWAGE:	5 %	OTHER (SPECIFY):	5 %
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brush

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Harburn

POPULATION 400

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, site on edge of granite depression

SOIL, DRAINAGE: no soil at site, drainage is runoff

OVERBURDEN - TYPE, THICKNESS: no overburden of any significance

BEDROCK - TYPE, DEPTH: granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to local swamp at toe of fill

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	10,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.:

DEPTH TO OVERBURDEN AQUIFER AND TYPE:	ft.	<input type="checkbox"/> CONFINED	<input type="checkbox"/> UNCONFINED
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DEPTH TO BEDROCK AQUIFER AND TYPE:	ft.	<input type="checkbox"/> CONFINED	<input type="checkbox"/> UNCONFINED
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NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: East South East

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: unknown

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: clean sand hauled to site

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified half-moon ramp method quite clean, well covered and compacted, absence of cover material at site, clean sand is hauled to the site dumping confined by the use of a fence restricting access to the dumping area, large volume of paper blown from the actual dumping area

J) CONCLUSIONS: no anticipated problems with this site except for the blowing paper and the movement of any leachate formed into a local swamp. Impairment of the quality of the swamp water will be limited because of the restricted size of the site. Site is remote from water users.

K) RECOMMENDATIONS:

- rectify housekeeping problems
- increase frequency of cover
- restrict dumping times and access with a gate

SITE A330309
TOWNSHIP OF GUILFORD
LOT 8, CONCESSION 3

A330309 TOWNSHIP OF GUILFORD, CONCESSION 3, LOT 8

DATE OF INSPECTION: July 21, 1975

INTRODUCTION

This two acre site serves part of the Township of Guilford, (population 400) on a 24 hour/day basis, receiving primary domestic garbage at an estimated rate of 3 tons/week. This site, is operated in a semi-circular ramp fashion with dumping taking place on the outside of the circle, over a steep embankment. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site lies on a raised granite knob which is part of a Precambrian granite knob and depression landscape. There is a significant topographic gradient between the stream flowing at the base of the knob and the site. The overburden at the site comprises sand and gravel overlain by a veneer of sandy soil.

The site is approximately 1000 feet from Hurricane Creek. Drainage characteristics at the site are good. There are no existing ground water users between the site and the creek. Leachate formed at the site will thus move fairly rapidly down the topographic gradient to the stream passing through about 1000 feet of sand and gravel prior to discharging into the stream. It is anticipated that the travel distance and time would significantly renovate the leachate so that the impact of the site on the stream will be minimal.

SITE OPERATION

Refuse is dumped over a steep embankment with a long face, and application of cover material is unsatisfactory. Gravel is hauled to the site and applied on a twice monthly basis, this is obviously ineffective, the site therefore is a mess with extensive amounts of uncovered burnt or burning garbage.

CONCLUSIONS AND RECOMMENDATIONS

This site is operated in an unacceptable manner. Although it is fairly small with no down gradient ground water users, the extensive amounts of uncovered refuse will continue to be a problem aesthetically, unless the mode of operation is upgraded. The site is not covered or compacted and presents a visual problem. Leachate production is limited and with travel over a fairly significant distance, leachate renovation should be relatively complete. By reducing the face to a width of forty feet, it could be more effectively covered, particularly if a covered chute is employed with compaction at the base of the chute. Burning would no longer be necessary and the smoke and rodent problems would be reduced.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Guilford

FILE NO.: A330309

LOCATION (Lot, Con., Twp., County): Lot 8, Conc. 3, Township of Guilford

OWNER (Name, Address, Phone No.): Combined Townships of Dysart et al (Box 389, Haliburton)

OPERATOR: W. B. Wood, Clerk

PHONE NO.: 705-457-1740

A) SITE DETAILS

AREA:	2 Acres	AREA FOR USE:	1 Acres	LIFETIME:	10 Years	DATE OPENED:	1971
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PRIOR LAND USE:	brush	FUTURE USE:	dump
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B) WASTES DISPOSED

QUANTITIES:	3 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open			
DOMESTIC:	100%	COMMERCIAL:	0%	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0%

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Guilford

POPULATION 400

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:
	<input checked="" type="checkbox"/> NO	

DISTRICT OFFICE REPORT:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:
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CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: raised granite knob and depression landscape

SOIL, DRAINAGE: sandy loam soil, good drainage

OVERBURDEN - TYPE, THICKNESS: sandy gravel

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Hurricane Creek, rapid surface runoff

NEAREST WATERCOURSE: 1,000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	10,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 10 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: North-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: limited, steep face uncovered

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: garbage tossed over a steep embankment with a long face, coverage impossible, gravel is hauled to the site and applied twice a month, extensive amounts of uncovered burnt and burning garbage, significant amounts of rotting uncovered garbage, always open - no gate.

J) CONCLUSIONS: site is operated in an unacceptable manner, it is fairly small with no down gradient ground water users, needs drastic upgrading, doubtful that leachate is affecting stream, renovation should be fairly complete

K) RECOMMENDATIONS:

-reduce the face to about a forty foot width to permit more effective cover

-consideration should be given to using the bottom of the cliff - garbage coverage and compaction should take place at the base of the chute

-burning should be stopped

SITE A330401
TOWNSHIP OF GLAMORGAN
LOT 30, CONCESSION 5

A330401 TOWNSHIP OF GLAMORGAN, LOT 30, CONCESSION 5, TOWNSHIP OF GLAMORGAN

DATE OF INSPECTION: July 18, 1977

INTRODUCTION

This one acre site serves part of the Township of Glamorgan (population 400) receiving 95% domestic refuse and 5% wood, brush and metals on a 24 hour/day basis at an estimated rate of 1 ton/week. This dump is operated as a modified ramp procedure with a semi-circular uncovered small lift that is burned on a continuous basis. This site is located in an abandoned sand pit, there is an extensive area for expansion and adequate cover is available locally. Refuse was found uncovered and burning during the site investigation. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a flat lying sand plain comprising glacial lacustrine sands up to at least 15 feet thick overlying Precambrian gneisses. Lying 300 feet from the Irondale River, drainage characteristics are good, but there is no provision on site for surface water control. Ground water flow is assumed to be in a southward direction towards Irondale. The flat gradient, and general renovative capacity of the overburden materials, suggest that there would be a very limited impact on ground and surface waters. There are no downgradient overburden aquifer users and the only wells that penetrate the bedrock aquifer are located 1250 feet upgradient. There are no water quality data available.

SITE OPERATION

Sand is used to cover the waste material, but this is done on a relatively infrequent basis. The wastes have been buried about 3 feet below grade and extends roughly about 7 feet above the existing grade. The operating face is about 150 feet x 5 feet. At the time of site inspection there appeared to be no cover and the refuse was on fire.

CONCLUSIONS AND RECOMMENDATIONS

This site, with its extensive amounts of uncovered wastes is a problem aesthetically if not environmentally. Adequate cover material is available on site, but reducing the dumping area with portable fencing to about 40' x 5' covering could be applied daily. Burning would then be no longer necessary and smoke and scavenger problems would be reduced. With proper confinement, cover and compacting the site could be more efficiently operated.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Glamorgan

FILE NO.: A330401

LOCATION (Lot, Con., Twp., County) Lot 30, Conc. 5, Township of Glamorgan

OWNER (Name, Address, Phone No.): Township of Glamorgan, Box 70, Gooderham

OPERATOR: E. V. Bates, Clerk

PHONE NO.: 705-447-2410

A) SITE DETAILS

AREA: 1 Acres AREA FOR USE: 1 Acres LIFETIME: 5 Years DATE OPENED: 1971

PRIOR LAND USE: sand pit FUTURE USE: nil

B) WASTES DISPOSED

QUANTITIES:	1 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
DOMESTIC:	95 %	COMMERCIAL:	0 %	INDUSTRIAL: 0 % LIQUID: 0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE: 0 % OTHER (SPECIFY): 5%

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Glamorgan

POPULATION

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying sand plain, glacial lacustrine sands

SOIL, DRAINAGE: sand, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, 15 feet plus

BEDROCK - TYPE, DEPTH: precambrian gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Irondale River, good drainage

NEAREST WATERCOURSE: 300 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	1,500ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: South

EFFECT OF SITE ON OVERBURDEN AQUIFER: local



G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 3 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 7 ft.

NATURE, THICKNESS OF COVER MATERIAL: limited, to large extent uncovered

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: sand is used to cover the garbage unfrequently, garbage is buried about 3 feet below grade and extends up to 7 feet above grade, operated with a face about 150 feet by 5 feet, no recent cover, garbage is burned

J) CONCLUSIONS: adequate cover material exists on site, but it is not used, the site is being operated in an unacceptable manner, burning should be discontinued and cover should be applied more frequently, the site is not a problem environmentally but esthetically

K) RECOMMENDATIONS:

-reduce the dumping area with portable fencing to make covering more efficient, by reducing the face to about 40 feet by 5 feet it could be covered on a daily basis

SITE A330501
TOWNSHIP OF LUTTERWORTH
LOT 17, CONCESSION 13

A-330501 TOWNSHIP OF LUTTERWORTH, LOT 17, CONCESSION 13,
TOWNSHIP OF LUTTERWORTH

DATE OF SITE INSPECTION: July 14, 1975

INTRODUCTION

This five acre site serves part of the Township of Lutterworth, (population 900) receiving 95% domestic garbage a 5% metals, brush etc. on a 24-hour/day basis at an estimated rate of 5 tons per week. Operated with an extremely long dumping face (250 ft.) refuse is uncovered and spread thinly over about 3500 sq. ft. of area. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

This site is located on a flat to slightly rolling sand plain, comprising lacustrine sands overlying Precambrian granite at an undetermined depth.

The fairly well drained sands have a high water table which is manifested in a local swamp about 200 feet from the toe of the fill.

There are no overburden groundwater users, the only residences in the area are located about 2500 feet downgradient on Bob Lake. It is anticipated that after 200 feet of travel through the sandy material leachate renovation will be complete and overburden waters discharging into Bob Lake will not be affected by the operation of the site.

SITE OPERATION

The site is well operated in a circular ramp fashion with domestic wastes being dumped on the outside of the ramp and metals, furniture, mattresses etc. being discarded on the inside portion of the circle. Thus the materials are neatly segregated, however, because of the length of the dumping face (250 ft.), efficient and effective coverage of the refuse is not possible. No evidence of recent burning of wastes was seen.

CONCLUSIONS AND RECOMMENDATIONS

This small site is upgradient from a fairly large swamp which should receive and assimilate any leachate generated. As a result no anticipated groundwater or surface water problems are expected to be associated with the site.

Compaction and more frequent cover is necessary to improve the working operation. If the dumping area is reduced to an area of about 30 feet x 15 feet cover could be applied more frequently and efficiently. This would eliminate the odour and litter problem at the site.



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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lutterworth

FILE NO.: A330501

LOCATION (Lot, Con., Twp., County): Lot 17, Conc. 13, Township of Lutterworth

OWNER (Name, Address, Phone No.): Township of Lutterworth, Box 176, Minden

OPERATOR: Mrs. B. A. Millar, Clerk

PHONE NO.: 705-286-1541

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	5 Acres	LIFETIME:	20 Years	DATE OPENED:	1973
PRIOR LAND USE:	brush			FUTURE USE:	nil		

B) WASTES DISPOSED

QUANTITIES:	5 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open				
DOMESTIC:	95 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0%	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	5% metals and brush

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lutterworth

POPULATION 900

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: cover twice/month, April to November

cover once/month, December to March

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat to slightly rolling sand plain

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, lacustrine

BEDROCK - TYPE, DEPTH: precambrian granites

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to a local swamp 200 feet from toe of swamp

NEAREST WATERCOURSE: 200 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	3000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: east

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 10 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, needs more adequate covering

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: circular ramp, domestic garbage being dumped on the outside of the ramp, metals, etc. being discarded on the inside portion of the circle, thus the materials are well segregated, dumping face is too long for efficient and effective coverage of the garbage. No evidence of recent burning of wastes.

J) CONCLUSIONS: small site is upgradient from a fairly large swamp which should receive all the generated leachate and adequately process it, thus no groundwater or surface water problems are expected - more efficient coverage will reduce odour and visual problems at the site.

K) RECOMMENDATIONS:

-needs better compaction and cover

-use portable fencing to reduce the dumping area to about 30 feet by 5 feet

**SITE A330503
TOWNSHIP OF LUTTERWORTH
LOT 22, CONCESSION 9**

A-330503 TOWNSHIP OF LUTTERWORTH, CONCESSION 9, LOT 22

DATE OF SITE INSPECTION: July 14, 1975

This is a private site that is used for the disposal of waste construction materials such as concrete, sand, wood etc. No liquids are disposed of at the site and no domestic garbage enters this site. The site is remote from water users and no leachate is produced. It is remote, well screened and is of no environmental concern.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lutterworth

FILE NO.: A330503

LOCATION (Lot, Con., Twp., County): Lot 22, Conc. 9, Township of Lutterworth

OWNER (Name, Address, Phone No.): Township of Lutterworth, Box 176, Minden

OPERATOR: Mrs. B. A. Miller, Clerk

PHONE NO.: 705-286-1541

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	1 Acres	LIFETIME:	25 Years	DATE OPENED:	1971
PRIOR LAND USE:	gravel			FUTURE USE:	nil		

B) WASTES DISPOSED

QUANTITIES:	1 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	-			
DOMESTIC:	0 %	COMMERCIAL:	100 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lutterworth

POPULATION N/A - private

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:	
	<input checked="" type="checkbox"/> NO		
DISTRICT OFFICE REPORT:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no wastes to be disposed in ravine

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, gravel outwash

SOIL, DRAINAGE: sandy loam

OVERBURDEN - TYPE, THICKNESS: thin gravels and sand

BEDROCK - TYPE, DEPTH: precambrian granites

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: internal

NEAREST WATERCOURSE: 4,000 ft.

NEAREST WELL:	4,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: South-East

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 30 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: adequate for inert materials, bad visually

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: small private site used for the disposal of waste construction materials such as concrete, sand, wood, etc. No liquids are disposed of at the site and no domestic garbage enters this site.

J) CONCLUSIONS: The site is remote from water users and will not produce any leachate. It is out of site and should be of no environmental concern.

K) RECOMMENDATIONS:

-housekeeping at site should be improved as should application of cover material to bury wastes

**SITE A330505
TOWNSHIP OF LUTTERWORTH
LOT 1, CONCESSION 2**

A-330505 TOWNSHIP OF LUTTERWORTH, LOT 1, CONCESSION 2,
TOWNSHIP OF LUTTERWORTH

DATE OF SITE INSPECTION: July 14, 1975

INTRODUCTION

This three acre site serves part of the Township of Lutterworth (population 100) on a 24 hour/day basis receiving 100% domestic wastes at an estimated rate of 1 ton per week. This dump, which is operated in a circular ramp fashion with dumping taking place on the outside of the circle, has grown to a point of inefficient operation. The disposal face is too wide and high, thus with sparse cover, the site presents an operational problem. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site lies on a flat lying thin lacustrine sand deposit in a Precambrian granite knob and depression landscape, drainage is fair to good. The toe of the fill has encroached upon a spring which flows from within the fill. The spring waters show signs of contamination. The water from the spring flows into a wooded area to submerge again below grade. No overburden aquifers of a continuous nature exists in this area so that migration of any contaminated waters must take place through the fracture system in the rock. A domestic bedrock well exists about 1500 feet from the site, the quality of water in this well has not been determined.

SITE OPERATION

The site face is approximately 150 feet by 5 feet. There is no cover material at the site and refuse remains uncovered. It appears that the site is covered on a semi-annual basis with sand hauled to the site. Although the contaminated spring at the edge of the site does not flow off the property, the water seeps back into the ground and could possibly enter the bedrock aquifer system.

CONCLUSIONS AND RECOMMENDATIONS

This site has extensive amounts of uncovered wastes and a localized water quality problem. The site should either be completely upgraded or closed in a suitable fashion. By severely reducing the dumping area with portable fencing, the operation can be changed into a more manageable ramp-lift operation. By reducing the face to 40 feet x 5 feet, the site could be covered efficiently on a two week basis. This small site is fairly remote but groundwater problems are anticipated. Whether these problems will extend to area wells cannot be ascertained because of the difficulty in determining groundwater flow in the fractured bedrock.

By confining, covering and compacting the refuse at the site on a two week basis during summer months and monthly during the winter, the site be visually acceptable. However it is doubtful that these improvements would contain or prevent groundwater contamination. A routine sampling of local wells should be made to determine the effect of this site and its future use.



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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lutterworth FILE NO.: A330505

LOCATION (Lot, Con., Twp., County): Lot 1, Conc. 2, Township of Lutterworth

OWNER (Name, Address, Phone No.): Township of Lutterworth, Box 176, Minden

OPERATOR: Mrs. R. A. Miller, Clerk PHONE NO.: 705-286-1541

A) SITE DETAILS

unlimited AREA: crown Acres AREA FOR USE: 1 Acres LIFETIME: 20 Years DATE OPENED: 1971

PRIOR LAND USE: brush FUTURE USE: dump

B) WASTES DISPOSED

QUANTITIES:	1 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	100 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lutterworth

POPULATION 100

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: cover twice/month during summer

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying thin lacustrine, sand deposits

SOIL, DRAINAGE: sandy loam and muck

OVERBURDEN -- TYPE, THICKNESS: sand

BEDROCK -- TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: springs on property

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 2,000 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M.

BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 3 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: South-East

EFFECT OF SITE ON OVERBURDEN AQUIFER: contaminated

BEDROCK AQUIFER: unknown

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: contaminated

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 10 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, inadequate frequency and thickness

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: operated in a circular ramp fashion with dumping taking place on the outside of the circle, the dump face is too long and too high (150 ft. by 5 ft.), large volume of uncovered garbage, site covered on a semi-annual basis, sand hauled to the site, contaminated spring at edge of site does not flow off the property, may enter rock aquifer

J) CONCLUSIONS: site has extensive amounts of uncovered garbage and a local water quality problem, site should be upgraded or suitably closed, site is remote but groundwater problems are anticipated.

K) RECOMMENDATIONS:

- severely reduce dumping face with portable fencing to change operation to a more manageable ramp-lift
- reduce face to 40 ft. by 5 ft. to cover it efficiently on a two-week basis
- confine, cover and compact on a two-week basis during summer months and monthly during the winter
- a routine sampling of local wells should be made prior to determining the future use of the site

SITE A330507
TOWNSHIP OF LUTTERWORTH,
LOT 17, CONCESSION 13

A-330507 TOWNSHIP OF LUTTERWORTH, LOT 17, CONCESSION 13,
TOWNSHIP OF LUTTERWORTH

DATE OF INSPECTION: July 17, 1975

INTRODUCTION

This two acre site serves part of the Township of Lutterworth (population 900) on a 24 hour/day basis and receives 100% domestic wastes at an estimated rate of 0.5 tons/week. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site lies on flat lying glacial lacustrine sands deposited in a Precambrian granite knob and depression landscape. Granite outcrops on the site and the sand forms a relatively thin veneer over bedrock. Within this geologic environment are found several localized swamps at distances of about 1000 feet from the fill. Holland Creek, the closest watercourse to the site is about 2000 feet away. With the exception of a bedrock well 1500 feet away that provides for a domestic supply, there are no overburden wells in the vicinity of the site.

SITE OPERATION

Sand is hauled to the site and it appears that attempts are made to cover the site monthly. Using a modified ramp method, the site has been kept relatively clean, compacted and covered.

RECOMMENDATIONS AND CONCLUSIONS

This small site is operated reasonably well and there is little environmental concern associated with the operation of this site.



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lutterworth FILE NO.: A330507

LOCATION (Lot, Con., Twp., County): Lot 17, Conc. 13, Township of Lutterworth

OWNER (Name, Address, Phone No.): Township of Lutterworth, Box 176, Minden

OPERATOR: Mrs. B. A. Millar, Clerk PHONE NO.: 705-286-1541

A) SITE DETAILS

AREA:	2 Acres	AREA FOR USE:	2 Acres	LIFETIME:	10 Years	DATE OPENED:	always open
PRIOR LAND USE:	brush			FUTURE USE:	brush		

B) WASTES DISPOSED

QUANTITIES:	0.5 Tons/Wk	0	Gallons/Wk	DISPOSAL PERIOD:			always open
DOMESTIC:	100 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lutterworth

POPULATION 900

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat lying glacial lacustrine sands in granite depression

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand granite

BEDROCK - TYPE, DEPTH: precambrian granite knob and depression landscape

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to localized swamps

NEAREST WATERCOURSE: 1000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	1,500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: limited

SITE A330602
TOWNSHIP OF MONMOUTH
LOT 24, CONCESSION 10

A-330602 TOWNSHIP OF MONMOUTH, LOT 24, CONCESSION 10,
TOWNSHIP OF MONMOUTH

DATE OF SITE INSPECTION: July 17, 1975

INTRODUCTION

This twenty acre site receives 100% domestic wastes on a 24 hour per day basis at an estimated rate of 4 tons per week from the Township of Monmouth (population 700). The site has some problems related primarily to its elevated location beside a wet land area that is void of cover material. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a hilly Precambrian landscape with depressions containing glacial-lacustrine sands. The overburden material consist of sands and drainage is good, the water table appears to be fairly high. A swamp located about 200 feet from the toe of the fill receives all the leachate generated at the site.

There are no downgradient groundwater users.

SITE OPERATION

The site exists on the edge of a steep embankment with refuse being dumped over the edge. The bank is about 20 feet high and is difficult to cover. Attempts to cover the garbage have been unsuccessful with the result that there is a long high face of uncovered refuse with associated problems of odour, rodents, birds and flies.

RECOMMENDATIONS AND CONCLUSIONS

There is no threat of contaminating groundwater. There is however, concern on that this operation may cause impairment of surface waters. A sampling program would ensure that drainage from the swamp is not having a significant impact downstream.

The site presents an unsightly appearance because of uncovered refuse.

It is suggested that the bank height be reduced, dumping of refuse in the swamp be avoided and a series of small confined covered lifts be initiated well back from the present dumping area. By severely reducing the dumping area with portable fencing, the operation can be changed into a more manageable ramp-lift operation. By reducing the face to 40 feet by 5 feet, the site could be effectively covered on a two week basis.

By confining, covering and compacting the refuse at the site on a two week basis during the summer months and monthly during the winter, the site will be visually acceptable. If proper operation is not possible, then abandonment of the site should be considered.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Monmouth

FILE NO.: A330602

LOCATION (Lot, Con., Twp., County): Lot 24, Conc. 10, Township of Monmouth

OWNER (Name, Address, Phone No.): Township of Monmouth, Box 10, Wilberforce

OPERATOR: Mrs. S. Hunter, Clerk

PHONE NO.: 705-448-2981

A) SITE DETAILS

AREA:	20 Acres	AREA FOR USE:	1 Acres	LIFETIME:	30 Years	DATE OPENED:	1971
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PRIOR LAND USE:	sand pit	FUTURE USE:	nil
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B) WASTES DISPOSED

QUANTITIES:	4 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	100 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0%	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Monmouth

POPULATION 700

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:
	<input checked="" type="checkbox"/> NO	

DISTRICT OFFICE REPORT:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:
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CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: hilly, rolling depressed precambrian peneplain

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sandy glacial - lacustrine

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to a swamp about 200 feet from toe

NEAREST WATERCOURSE: 200 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	5,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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	<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE:	2 ft.	<input type="checkbox"/> CONFINED	<input checked="" type="checkbox"/> UNCONFINED
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DEPTH TO BEDROCK AQUIFER AND TYPE:	ft.	<input type="checkbox"/> CONFINED	<input checked="" type="checkbox"/> UNCONFINED
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NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: north-north-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 15 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand cover, limited amounts

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site exists on the edge of a steep embankment with the garbage being tossed over the edge. The bank is about 20 feet high and can't be effectively covered. The face also is about 200 feet in length so that garbage is randomly and thinly spread.

J) CONCLUSIONS: site is not expected to cause groundwater contamination, its unsightly appearance, uncovered garbage and proximity to the swamp are bad.

K) RECOMMENDATIONS:

-the bank height should be reduced, the swamp be avoided and a series of small confined lifts be initiated well back from the present dumping area. The length of the dumping face should be severely limited by the use of portable fencing, confine, cover and compact on a two week basis in summer and monthly during the winter

-abandon site if it can't be upgraded

SITE A330702
TOWNSHIP OF SHERBORNE
LOT 5, CONCESSION 13

A-330702 TOWNSHIP OF SHERBORNE, LOT 5, CONCESSION 13,
TOWNSHIP OF SHERBORNE

DATE OF INSPECTION: July 11, 1975

INTRODUCTION

This five acre site receives 100% domestic wastes on a 24 hour/day basis and serves the Township of Sherborne (population 500), a total of approximately 1 ton of refuse per week is disposed. Operated as a dump the site has problems due to the practice of dumping over a significantly high cliff which makes it impractical to apply cover material. No consultant's plan or report exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a high hill. Physiographically the area resembles a spillway valley filled with sand, the dump lies on a high edge of the valley wall. Active mining of gravel near the site has taken place with excavation proceeding 30 feet below grade in the valley bottom. Bedrock at the site is Precambrian granite.

The area is high and dry with about 800 feet separating the site from Hollow River. Drainage at the site is good with a steep gradient being developed in the sand. The site is remote with no groundwater users downgradient.

SITE OPERATION

The site lies on the edge of a steep sandbank with the refuse being dumped over the edge. The bank is about 35 feet high which makes cover application difficult. the result is a wide 75 feet high face of uncovered garbage with associated problems of odour, rodents, birds and flies. Scavaging by bears is common resulting in refuse littering the surrounding area. The top of the dump is well covered but in general the site operation is unsatisfactory.

RECOMENDATIONS AND CONCLUSIONS

The site is remote with no downgradient users. No water problems are anticipated but the site has aesthetic problems. No burning was evident at the site.

The site could be managed better. Several small lifts could be established and the abundant cover at the site could be effectively used, instead of ineffectively covering one massive cliff. In general this would also improve the housekeeping and reduce the problems with scavenging, rodents, flies and odours.

Monitoring of groundwater downgradient should be considered to determine the renovative capacity of the sand and gravel under conditions of a steep gradient and short travel distance to the river.

It is recommended that the slope and lift be reduced, that compaction and cover practices be established and that the housekeeping at the site be improved by employing at least a part time attendant at the site.



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Sherborne

FILE NO.: A330702

LOCATION (Lot, Con., Twp., County): Lot 5, Conc. 13, Township of Sherborne

OWNER (Name, Address, Phone No.): Township of Sherborne, McClintock & Livingston

OPERATOR: Mrs. D.J. Griffin, Clerk, Box 99, Dorset PHONE NO.: 705-766-2211

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	1 Acres	LIFETIME:	5 Years	DATE OPENED:	1971
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PRIOR LAND USE: sand and gravel pit FUTURE USE: brush

B) WASTES DISPOSED

QUANTITIES:	1 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open		
DOMESTIC:	100%	COMMERCIAL:	0%	INDUSTRIAL:	0 % LIQUID: 0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 % OTHER (SPECIFY): 0

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Sherborne

POPULATION approximately 500

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no burning
cover twice/month, May to November
cover once/month, December to April

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: located on a high hill on edge of spillway valley

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand and gravel, 35 feet plus

BEDROCK - TYPE, DEPTH: precambrian granite and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Hollow River, good drainage

NEAREST WATERCOURSE: 800 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	1,500 ft. +	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 15 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 16 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: virtually no effective recent cover

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site on edge of steep sand bank with garbage being tossed over the edge, bank is about 35 feet high and can't be covered, face is also long (75 feet, plus) top of dump is well covered, but in general the site operation is unsatisfactory, no burning was evident at the site

J) CONCLUSIONS: site is uncovered, housekeeping is bad, site is remote with no downgradient users, no water problems are anticipated but the site is a visual-esthetic problem, site could be managed better

K) RECOMMENDATIONS:

- several small lifts could be established and the abundant cover on site could be effectively used
- the slope and lift must be reduced
- compaction and cover practices must be established
- a part time attendant should be employed at the site
- if not possible to upgrade, site should be closed

**SITE A330704
TOWNSHIP OF McCLINTOCK
LOT 23, CONCESSION A**

A-330704 TOWNSHIP OF McCLINTOCK, LOT 23, CONCESSION A,
TOWNSHIP OF McCLINTOCK

DATE OF SITE INSPECTION: July 11, 1975

INTRODUCTION

This five acre site receives 100% domestic garbage on a 24 hour/day basis from the Township of McClintock (population 300). It is operated as a small dump and receives about 1/2 ton of refuse per week. There is no apparent attempt to cover the site which has a potential surface water problem. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a hummocky Precambrian granite landscape with a swamp lying at the toe of the fill, drainage is probably towards the Oxtongue River. Overlying the bedrock is a veneer of sand.

With the toe of the fill in a swamp there is a potential threat to surface water. The swamp appears to have sufficient assimilative capacity for the leachate produced, this should however be confirmed by a sampling program.

SITE OPERATION

Employing a ramp type operation, the refuse is dumped over a small rise into a swamp-filled low area. No attempt is made to confine, compact and cover the wastes.

RECOMMENDATIONS AND CONCLUSIONS

This dump is covered rarely if at all. Located at the edge of a small cliff, the refuse is dumped directly into a swamp. Though no groundwater users are affected, the site is a visual problem infested by scavengers, rodents and flies.

It is recommended that this site be cleaned and refuse confined, compacted and covered, if this is not possible, consideration should be given to finally covering and closing the site.



Ministry of the
Environment

Ontario

LANDFILL SITE DATA SUMMARY

SITE NAME: Township of McClintock

FILE NO.: A330704

LOCATION (Lot, Con., Twp., County): Lot 23, Conc. A, Township of McClintock

OWNER (Name, Address, Phone No.): Township of Sherborne, McClintock & Livingston

OPERATOR: Mrs. D.J. Griffin, Clerk, Box 99, Dorset PHONE NO.: 705-766-2211

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	1 Acres	LIFETIME:	Years	DATE OPENED:	1971
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PRIOR LAND USE: gravel pit FUTURE USE: dump

B) WASTES DISPOSED

QUANTITIES:	0.5 tons/Wk	1	Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	100 %	COMMERCIAL:	0%	INDUSTRIAL:	0%	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	0 %
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of McClintock

POPULATION 300

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no burning

cover twice/month, May to November

cover once/month, December to April

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: hummock precambrian peneplain landscape

SOIL, DRAINAGE: limited thickness and development of sandy loam

OVERBURDEN - TYPE, THICKNESS: thin sand

BEDROCK - TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: swamp at toe which drains to Oxtongue River

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	400 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 1

DEPTH TO OVERBURDEN AQUIFER AND TYPE: ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: local

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 15 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: infrequent thin sandy cover

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: ramp-type, garbage is tossed over a small rise into a swamp-filled low area at the toe of fill, no cover, compaction, confinement or attendant exist at this site.

J) CONCLUSIONS: site is a visual as well as a potential surface water problem, swamp receiving leachate seems to be an ideal media for renovation of waste waters, dump is rarely covered, no groundwater problems, problems with scavengers, rodents and flies because of lack of cover, needs upgrading or closure.

K) RECOMMENDATIONS:

-if the impairment of the swamp can be tolerated, the site should be cleaned up, confined, compacted and covered on a more frequent basis, otherwise cover and close it.

**SITE A330801
TOWNSHIP OF SNOWDON
LOT 20, CONCESSION 13**

A-330801 TOWNSHIP OF SNOWDON, CONCESSION 13, LOT 20

DATE OF SITE INSPECTION: May 26, 1976

INTRODUCTION

This site occupies about four acres of land, approximately one acre is used to dispose of domestic garbage at an estimated rate of 2 tons per month. The site serves a part of the Township of Snowdon (population 475) and primarily is used by the seasonal cottage population.

No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located at the edge of a ravine with dumping being confined by a pair of sand berms on either side of the site. Basically the site is in a sand filled depression in Precambrian bedrock. The overburden consists of a thin layer of sand, therefore, sufficient cover material is unavailable locally and has to be hauled in.

The nearest water course is located about 6,000 feet down-gradient further, the site is remote from local groundwater users. There is no attempt to control the flow of surface water at the site. However, the distance between the site and the surface water body is sufficient enough to allow for renovation and dilution of leachate produced.

SITE OPERATION

The site is operated by a modified ramp method with the ramp gradually extending out into the ravine. This has resulted in a gradual increase of the working face, which would become progressively more difficult to cover. The site was littered with uncovered refuse at the time of the field inspection. Restricting the dumping face with sand berms facilitates the covering procedure by confining the refuse, but is only effective if the refuse is placed within the dumping area and covered.

CONCLUSIONS AND RECOMMENDATIONS

There are no anticipated water quality problems as a result of the use of the site. However, while attempts have been made to improve the site, confinement of the refuse needs to be followed up with adequate cover. Housekeeping then, at the site is the primary concern. An attendant should be posted at the site during the summer season. Restricted access to the site could assist in tidying the housekeeping problems.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Snowdon

FILE NO.: A330801

LOCATION (Lot, Con., Twp., County): Lot 20, Conc. 13, Township of Snowdon

OWNER (Name, Address, Phone No.): Township of Snowdon, R.R. #1, Minden

OPERATOR: G. Wynne, Clerk

PHONE NO.: 705-286-2657

A) SITE DETAILS

AREA: 4 Acres AREA FOR USE: 1 Acres LIFETIME: 10 Years DATE OPENED: 1971

PRIOR LAND USE: ravine FUTURE USE: dump

B) WASTES DISPOSED

QUANTITIES: 2 Tons/Wk 0 Gallons/Wk DISPOSAL PERIOD: always open

DOMESTIC: 100 % COMMERCIAL: 0 % INDUSTRIAL: 0 % LIQUID: 0 %

AGRICULTURAL: 0 % HAZARDOUS: 0 % HAULED SEWAGE: 0 % OTHER (SPECIFY): 0 %

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Snowdon

POPULATION 475

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rolling, site on edge of a ravine

SOIL, DRAINAGE: thin poorly developed sandy loams

OVERBURDEN - TYPE, THICKNESS: thin sands filling depressions in bedrock

BEDROCK - TYPE, DEPTH: precambrian.

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: ravine for runoff waters drains to small stream 6000 feet away

NEAREST WATERCOURSE: 6,000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 3,000 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M. BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: South

EFFECT OF SITE ON OVERBURDEN AQUIFER: local

BEDROCK AQUIFER: local

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 25 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: infrequent thin sandy cover

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified ramp method with the ramp gradually being built out into the ravine, result is an increasing face height which will become progressively more difficult to cover. Site was littered with uncovered garbage at the time of field inspection no cover material on site, so clean sand is hauled to the site, dumping face is confined with sand berms.

J) CONCLUSIONS: no anticipated water quality problems as a result of the use of the site, attempts have been made to improve the site, the confined garbage needs to be covered on a regular basis, housekeeping at the site is poor.

K) RECOMMENDATIONS:

-cover the garbage

-improve the general housekeeping at the site

-post an attendant at the site during the holiday season since access to the site at present is not restricted

**SITE A330803
TOWNSHIP OF SNOWDON (IRONDALE)
LOT 25, CONCESSION 6**

A-330803 TOWNSHIP OF SNOWDON (IRONDALE), LOT 25, CONCESSION 6

DATE OF SITE INSPECTION: July 17, 1975

INTRODUCTION

This fifty acre site receives 100% domestic garbage at a rate of 1 ton/week, on a 24 hour/day basis and serves the southern portion of the Township of Snowdon (population 300). No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Located on a flat sand plain, the overburden material at the site consists of sands extending to a depth of 10 feet and overlying Precambrian gneiss.

The site is relatively remote being about 1000 feet from the nearest surface watercourse. Drainage at the site is good. There are no wells within 3000 feet of the site.

SITE OPERATION

The refuse is covered with sand and compacted on what appears to be about a monthly basis. With a single lift about 10 feet high and about 100 feet wide, efficient covering of the face is becoming difficult.

RECOMMENDATIONS AND CONCLUSIONS

The site is remote, small and clean, wastes are well covered and compacted. There are no water users within about 3000 feet of the site. Thickness of sand, is adequate and leachate formed should be sufficiently attenuated. The present working face should be closed and properly covered. A second lower face should be developed and confined by portable fencing so that a working area 40 feet x 5 feet maximum is developed. This will permit efficient use of cover material and extend the life of the site.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Snowdon

FILE NO.: A330803

LOCATION (Lot, Con., Twp., County): Lot 25, Conc. 6, Township of Snowdon

OWNER (Name, Address, Phone No.): Township of Snowdon, R.R. #1, Minden

OPERATOR: G. Wynne, Clerk

PHONE NO.: 705-286-2657

A) SITE DETAILS

AREA: 50 Acres AREA FOR USE: 20 Acres LIFETIME: 50 Years DATE OPENED: always open

PRIOR LAND USE: brush and pasture FUTURE USE: brush and pasture

B) WASTES DISPOSED

QUANTITIES: 1 Tons/Wk 0 Gallons/Wk DISPOSAL PERIOD: always open

DOMESTIC: 100 % COMMERCIAL: 0% INDUSTRIAL: 0 % LIQUID: 0 %

AGRICULTURAL: 0 % HAZARDOUS: 0 % HAULED SEWAGE: 0 % OTHER (SPECIFY): 0%

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Snowdon

POPULATION 300

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: no burning

cover twice/month, April to November

cover once/month, December to March

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand plain

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, 10 feet

BEDROCK - TYPE, DEPTH: precambrian gneiss

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: good drainage

NEAREST WATERCOURSE: 1,000 ft.

F) HYDROLOGY - GROUNDWATER: NEAREST WELL: 3,000 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M. BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 7 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: Limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, fair coverage

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site is covered with sand and compacted on about a monthly basis, operated as a single lift about 10 feet high with a face about 10 feet high with a face about 100 feet long, coverage of face is becoming difficult, it is suggested that a second lower face be developed.

J) CONCLUSIONS:

Site is remote and small, it is clean, covered and compacted, no water users within about 3000 feet of site, renovation of any leachate formed will be adequate before local water resources are affected.

K) RECOMMENDATIONS:

-present working face should be closed off and properly covered, a second lower face should be developed and confined by portable fencing so that a working face 40 feet by 5 feet maximum is developed. This will permit efficient use of the cover material and extend the life of the site.

SITE A330901

TOWNSHIP OF STANHOPE

LOT 8, CONCESSION 9

A330901 TOWNSHIP OF STANHOPE, CONCESSION 9, LOT 8

DATE OF SITE INSPECTION: May 20, 1976

INTRODUCTION

This site, occupies an area of five acres. Two acres of which are used for waste disposal. Waste disposed consists of domestic wastes (90%) along with brush and metals (10%) at an estimated rate of 2 tons/week. This small site serves the Township of Stanhope (population 750) and its seasonal cottage population.

No consultants report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

This site is located on flat land adjacent to a small swamp in a granite depression. The landfill operation is gradually filling the wet lands located at the toe of the fill area. Little soil exists at the site, and cover material is hauled in. There is no attempt to control the flow of surface water, therefore, surface runoff and leachate enters directly into the swamp. The site is well covered, so it is unlikely that a large volume of runoff over the landfill surface enters the swamp. Surface waters within the site boundary are contaminated to some degree. The local groundwater flow pattern probably consists of an upward component of flow, it is, therefore, unlikely for contaminants to leave the site boundary. Renovation of waste waters should be quite complete in the biologically active swampy area. The site is remote and while no actual water samples have been collected and analyzed, there appears to be no serious threat to ground and surface waters.

SITE OPERATION

The site is operated using an area fill method with three step lifts each five feet high and a face one hundred feet wide. The lifts, despite the length of the face are neat, clean and well covered. Brush has been well segregated at the site, but metals have been incorporated into the fill. Perhaps a metal recovery program should be instituted at the site by setting aside an area for metals that eventually could be hauled away by a scrap metal dealer.

No cover material is available at the site, so clean sand with some fine gravel is hauled in. By restricting the dumping area less material could be used to obtain a more efficient cover. In general, the site is well operated.

CONCLUSION AND RECOMMENDATIONS

Leachate generated will move from the toe of the fill into the swamp. Impairment of the swamp water will be minimal because of the relatively small size of the site, in addition the flow of contaminants away from the site will be restricted because of local hydrogeologic condition. The site is remote from water users, and there is no concern for deterioration in water quality.

The only recommendation to be applied to the site would be the reduction of the working face in terms of the length of the dumping area to increase cover efficiency and thus extend the life of the site.



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Stanhope

FILE NO.: A330901

LOCATION (Lot, Con., Twp., County): Lot 8, Conc. 9, Township of Stanhope

OWNER (Name, Address, Phone No.): Township of Stanhope, R. R. #1, Haliburton

OPERATOR: G. C. Bain, Clerk

PHONE NO.: 705-489-2379

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	2 Acres	LIFETIME:	20 Years	DATE OPENED:	1971
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PRIOR LAND USE:	gravel pit	FUTURE USE:	park
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B) WASTES DISPOSED

QUANTITIES:	2 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	90 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	10% metals and brush
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Stanhope

POPULATION 750

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:
	<input checked="" type="checkbox"/> NO	

DISTRICT OFFICE REPORT:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:
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CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand filling granite depression

SOIL, DRAINAGE: thin poorly developed sandy loam

OVERBURDEN - TYPE, THICKNESS: sand filling granite depressions

BEDROCK - TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to small swamp at toe of fill

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	1,800 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 10 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: sand hauled to site, adequate thickness

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: area fill method, three five-foot high step lifts that are about 100 feet long each, lifts are neat, clean and well covered, brush well segregated at the site, but metals have been incorporated into the fill, clean sand with some fine gravel is hauled to the site for cover, no face restrictions are employed.

J) CONCLUSIONS: no anticipated problems with this site except perhaps the length of the working face and the movement of any leachate formed into the swamp at the toe of the fill. Impairment of swamp limited by small size swamp, renovation of leachate in swamp, no water user problems.

K) RECOMMENDATIONS:

-restrict length of dumping face to increase cover efficiency and extend life of site

**SITE A330902
TOWNSHIP OF STANHOPE
LOT 2, CONCESSION 5**

A330902 TOWNSHIP OF STANHOPE, LOT 2, CONCESSION 5,
TOWNSHIP OF STANHOPE

DATE OF SITE INSPECTION: July 22, 1976

INTRODUCTION

This ten acre site receives 90% domestic and 10% brush type refuse on a 24 hour/day basis from the Township of Stanhope (population 750) at an estimated rate of 2 tons/week.

No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a flat sand plain and is underlain by sand and gravel deposits to an estimated depth of about 10 feet. The site, is about 1800 feet from Maple Lake. It is well drained and remote from either bedrock or overburden well water users.

SITE OPERATION

Operated by trench and fill method with two trenches about 5 feet deep, the site is not covered frequently. Burning is employed as a means of bulk reduction.

RECOMMENDATIONS AND CONCLUSIONS

The site is remote and fairly clean. But the refuse is frequently burned in the trenches rather than covered or compacted. By using one trench instead of two the refuse could be covered and compacted more completely.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Stanhope

FILE NO.: A330902

LOCATION (Lot, Con., Twp., County): Lot 2, Conc. 5, Township of Stanhope

OWNER (Name, Address, Phone No.): Township of Stanhope, R.R. #1, Haliburton

OPERATOR: G. C. Bain, Clerk

PHONE NO.: 705-489-2379

A) SITE DETAILS

AREA:	10 Acres	AREA FOR USE:	2 Acres	LIFETIME:	20 Years	DATE OPENED:	1971
PRIOR LAND USE:	gravel pit			FUTURE USE:	park		

B) WASTES DISPOSED

QUANTITIES:	2 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open				
DOMESTIC:	95 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY) 5% brush, metals, etc.	

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Stanhope

POPULATION 750

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL:

no burning
cover twice/month, April to November
cover once/month, December to March

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand plain

SOIL, DRAINAGE: sandy loam

OVERBURDEN - TYPE, THICKNESS: sand and gravel to 10 feet

BEDROCK - TYPE, DEPTH: precambrian granites

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Maple Lake, good drainage

NEAREST WATERCOURSE: 1,800 ft.

NEAREST WELL:	1,800 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE:	7 ft.	<input type="checkbox"/> CONFINED	<input checked="" type="checkbox"/> UNCONFINED
DEPTH TO BEDROCK AQUIFER AND TYPE:	ft.	<input type="checkbox"/> CONFINED	<input type="checkbox"/> UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: garbage in trenches, not covered

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

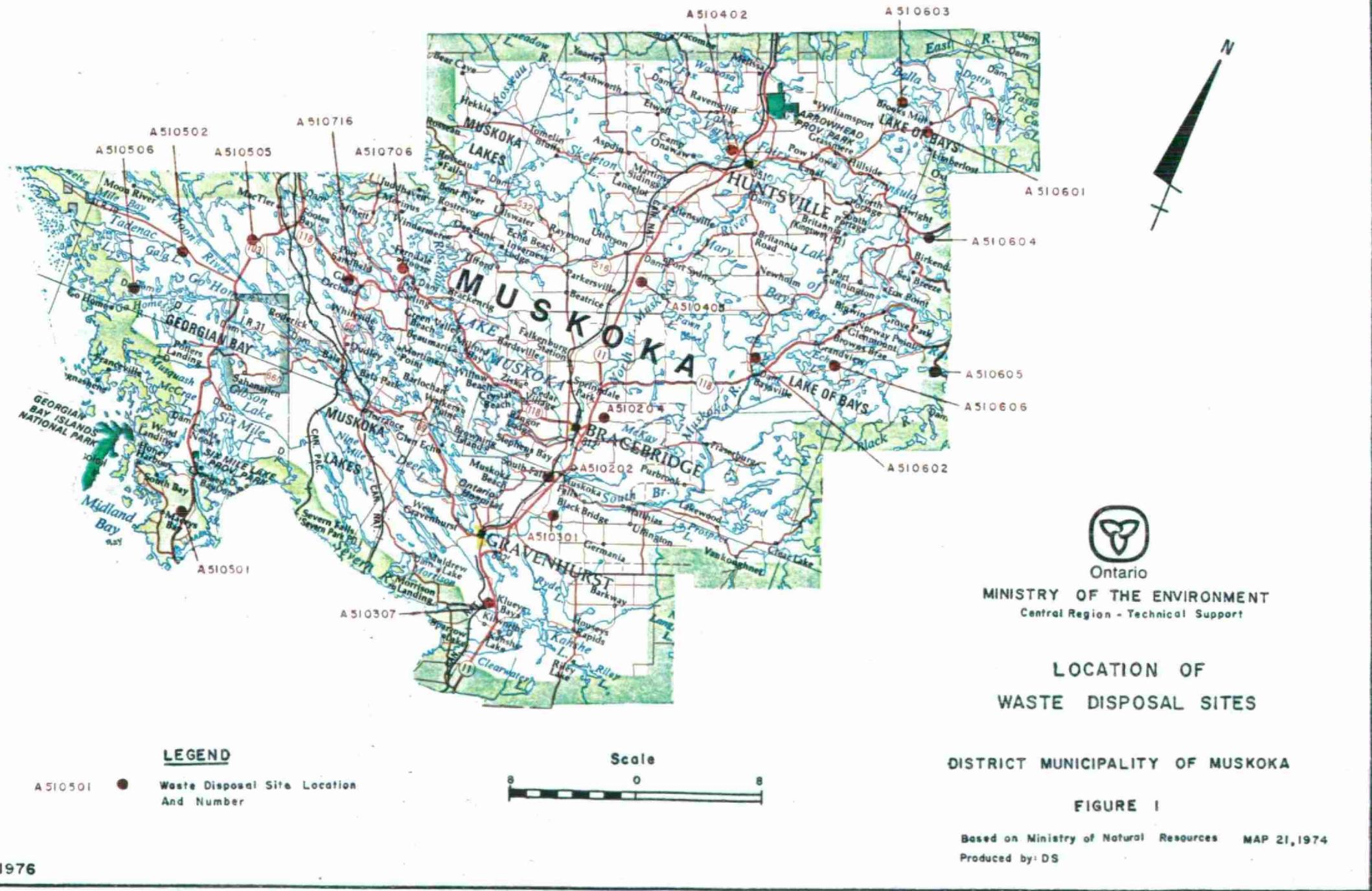
I) OPERATIONAL PROCEDURES: operated by trench and fill method, with 2 trenches about 5 feet deep, site is not covered frequently but is often burned to reduce the bulk of the garbage

J) CONCLUSIONS: site is very remote and fairly clean, garbage in trenches is frequently burned rather than being covered or compacted

K) RECOMMENDATIONS:

-rather than using 2 trenches, only one should be used
-the garbage should be covered and compacted

THE DISTRICT
MUNICIPALITY OF MUSKOKA



SITE A510204

**TOWN OF BRACEBRIDGE
LOT 9, CONCESSION 3,
MACAULAY TOWNSHIP**

A510204 TOWN OF BRACEBRIDGE, LOT 9 CONCESSION 3,
MACAULAY TOWNSHIP

DATE OF SITE INSPECTION: July 4, 1975

INTRODUCTION

This 515 acre site receives 65% domestic and 35% industrial waste from the Town of Bracebridge, the Township of Humphrey and occasionally from Muskoka Container Service at an estimated rate of 75 tons/week. As a high volume landfill site, it has been open for about five years with good results. The site serves an estimated population of 8,000 people. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Located on flat beach sand deposits that extend at least 40 feet below grade the site is well drained and dry, it lies about 5,000 feet from the Muskoka River and about 2,500 feet from the nearest potable well water supply. Under the existing hydrogeological conditions leachate generated at the site is expected to be completely renovated. No adverse effects on ground or surface waters is anticipated.

SITE OPERATION

Operated in conjunction with an active sand mining operation, the refuse basically is being used to fill in the sand pit as mining proceeds. Using lifts about 100 feet by 6 feet to permit several large packers to dump at one time, the operation is efficient, clean, well compacted and covered.

CONCLUSIONS AND RECOMMENDATIONS

The site is clean, remote and well managed. No problems are anticipated with water supplies as a result of the use of the site. A municipal well supply is located about 5,000 feet from the site though contamination to this supply is exceedingly remote a limited monitoring programme should be considered.



LANDFILL SITE DATA SUMMARY

SITE NAME: Town of Bracebridge

FILE NO.: A510204

LOCATION (Lot, Con., Twp., County): Lot 9, Conc. 3, Township of Macaulay

OWNER (Name, Address, Phone No.): Town of Bracebridge, Box 360, 23 Dominion Street, Bracebridge

OPERATOR: W.T. Quemby, Road Superintendent PHONE NO.: 705-645-2239

A) SITE DETAILS

AREA: 515 Acres AREA FOR USE: 40 Acres LIFETIME: 23 Years DATE OPENED: 1972

PRIOR LAND USE: gravel pit FUTURE USE: recreation open space

B) WASTES DISPOSED

QUANTITIES: 75 Tons/Wk 0 Gallons/Wk DISPOSAL PERIOD: 8-1 p.m. - Sat. 8-5 p.m. - Mon. to Fri.

DOMESTIC: 80 % COMMERCIAL: 0% INDUSTRIAL: 20 % LIQUID: 0 %

AGRICULTURAL: 0 % HAZARDOUS: 0 % HAULED SEWAGE: 0 % OTHER (SPECIFY): 0 %

C) SITE REVIEW:

MUNICIPALITIES SERVED: Town of Bracebridge

POPULATION 800

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:CONDITIONS OF APPROVAL: none, except the following of consultant's plan,
Totten, Sims & Hubicki

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat beach sand deposits

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN - TYPE, THICKNESS: sand, 40 feet plus

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to the Muskoka River, good drainage

NEAREST WATERCOURSE: 5,000 ft.

F) HYDROLOGY - GROUNDWATER:
NEAREST WELL: 2,500 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M.
 BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 20 ft. + CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 35 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 8 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, covered adequately daily

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site operated in conjunction with an active sand mining operation, garbage is used to fill in the sand pit as mining proceeds, lifts measure 100 feet by 6 feet to permit several large packers to dump at one time.

J) CONCLUSIONS: operation is efficient, clean, well compacted and covered, site is remote and well managed meeting all MOE requirements, no problems are anticipated with water supplies as a result of the use of the site.

K) RECOMMENDATIONS:

-to ensure the quality of the ground water system which supplies a municipal well water supply located about 1 mile from the site, a monitoring system is suggested at the site.

SITE A510307

TOWN OF GRAVENHURST (MORRISON WARD)

LOTS 26 AND 27

GRAVENHURST RANGE WEST

A510307 TOWN OF GRAVENHURST (MORRISON WARD), LOTS 26 & 27,
GRAVENHURST RANGE WEST

DATE OF SITE INSPECTION: July 9, 1975

INTRODUCTION

This 50 acre site, located in a sand pit, receives 80% domestic, along with 20% commercial-industrial wastes, and brush, metals, etc. from the wards of Wood, Muskoka, Morrison and Ryde, it serves a total population of about 6800. The site is clean, dry and has ample cover material. A consultant's report exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located on a flat sand plain made up of outwash sands with some gravel. The site is well drained and the nearest watercourse is Jervins Creek, about 2,500 feet away. The nearest well is 2500 feet upgradient.

SITE OPERATION

Located in a sand pit, the refuse is deposited in a series of shallow lifts and covered daily with locally obtained sand.

RECOMMENDATIONS AND CONCLUSIONS

The site is remote and poses little threat to water users. It is covered fairly well, refuse is well segregated and the site is clean and dry.

SITE A510402

TOWN OF HUNTSVILLE (CHAFFEY SITE)

LOT 10, CONCESSION 3

CHAFFEY WARD



Ministry of the
Environment

Ontario

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LANDFILL SITE DATA SUMMARY

SITE NAME: Town of Gravenhurst

FILE NO.: A510307

LOCATION (Lot, Con., Twp., County): Lot 26, 27, GRW, Morrison Ward

OWNER (Name, Address, Phone No.): Town of Gravenhurst, Box 1360, 1st & Harvey Streets

OPERATOR: J. Swalm, Public Works Superintendent PHONE NO.: 705-687-3412

A) SITE DETAILS

AREA:	50 Acres	AREA FOR USE:	30 Acres	LIFETIME:	10 Years	DATE OPENED:	1972
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PRIOR LAND USE: gravel pit FUTURE USE: industrial land

B) WASTES DISPOSED

QUANTITIES:	65 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:				
DOMESTIC:	90 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY)	10% brush, metals, etc.

C) SITE REVIEW:

MUNICIPALITIES SERVED: Town of Gravenhurst

POPULATION 6,800

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: that operation be in accordance with plan submitted by
clerk-administrator

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand plain, outwash sands & gravels

SOIL, DRAINAGE: sandy loam

OVERBURDEN - TYPE, THICKNESS: sand and gravel

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Jervins Creek, good drainage

NEAREST WATERCOURSE: 2,500 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 18 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 20 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 20 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, covered inadequately daily

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: located in a sand pit, refuse is deposited in a series of shallow lifts and covered daily, locally obtained sand is used but in insufficient quantity, thus uncovered garbage was seen at the site, some burning of garbage seen.

J) CONCLUSIONS: site is fairly remote and poses little threat to water users, reasonable management is practiced at the site, it is covered fairly well, the refuse is well segregated and the site is clean and dry, an excellent site for monitoring.

K) RECOMMENDATIONS:

-more cover material should be applied on a daily basis

A510402 TOWN OF HUNTSVILLE (CHAFFEY SITE), LOT 10,
CONCESSION 3, CHAFFEY WARD

DATE OF SITE INSPECTION: July 9, 1975

INTRODUCTION

This 20 acre site receives 30% domestic refuse, 60% commercial-industrial waste and 10% brush, metals, etc. from the Town of Huntsville (population 10,000) on a 7 day/week basis (9 am to 7pm). The site has a history of being poorly operated which was confirmed during the site inspection. No consultant's report or plan exists for the site which at one time had received a provisional certificate of approval. This certificate apparently has not been renewed.

HYDROGEOLOGY

Located on a flat sand plain which dips to a cedar swamp at the toe of the fill, the site is relatively well drained with leachate discharging into the swamp. No groundwater users are located downgradient of the site, though there are some wells upgradient, these wells should be routinely sampled as a precautionary measure.

SITE OPERATION

A haphazard area fill method is used at the site with poor segregation of wastes and burning taking place. Sand is obtained from a local pit to cover the refuse, but the cover is inadequate. Burning is the common bulk reduction method on site and large quantities of metals, wood and industrial solids are found randomly strewn over the property.

RECOMMENDATIONS AND CONCLUSIONS

The site is poorly operated with open burning and scavenging taking place. The landfill slope is quite steep and should be reduced in order to be effectively covered. Poor segregation of wastes takes place. The landfilling operation is not to standard and should be drastically upgraded with more complete cover and general housekeeping improvements. If this is not possible, it is suggested that this site be closed.



Ministry of the
Environment

Ontario

LANDFILL SITE DATA SUMMARY

SITE NAME: Town of Huntsville

FILE NO.: A510402

LOCATION (Lot, Con., Twp., County): Lot 10, Conc. 3, Chaffey Ward

OWNER (Name, Address, Phone No.): Town of Huntsville, Box 269, 37 Main Street East

OPERATOR: C. Chataway, Road Superintendent

PHONE NO.: 705-789-5575

A) SITE DETAILS

AREA:	20 Acres	AREA FOR USE:	5 Acres	LIFETIME:	2 years	DATE OPENED:	1971
PRIOR LAND USE:	brush			FUTURE USE: agriculture			

B) WASTES DISPOSED

QUANTITIES:	75 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: 9am-7pm - 7 days				
DOMESTIC:	70%	COMMERCIAL:	0 %	INDUSTRIAL:	15 %	LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	15% brush, wood, metals, etc.

C) SITE REVIEW:

MUNICIPALITIES SERVED: Town of Huntsville

POPULATION 10,000

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:	
	<input checked="" type="checkbox"/> NO		
DISTRICT OFFICE REPORT:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: certificate of approval not renewed

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand plain, dips into cedar swamp

SOIL, DRAINAGE: sandy loam, surficially well drained

OVERBURDEN - TYPE, THICKNESS: sand

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to local swamp, fair drainage

NEAREST WATERCOURSE: 0 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 1 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 35 ft.

NATURE, THICKNESS OF COVER MATERIAL: local sand, inadequate cover

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: haphazard area - fill method, poor segregation of wastes, burning of garbage is frequent, sand from local pit is used for cover, inadequate supplies of cover used, burning is predominant bulk reduction method used, large quantities of metals, wood and industrial solids strewn over site.

J) CONCLUSIONS: site is poorly operated, open burning takes place along with scavenging, landfill slope far too great to be effectively covered, poor segregation of wastes - uncovered and unsightly, obnoxious odours from rotting uncovered garbage

K) RECOMMENDATIONS:

-drastically upgrade site with more complete cover and general housekeeping improvements
-check local wells for quality problems
-close site if it can't be upgraded

-restrict dumping area, compact and cover daily
-segregate various wastes, burn wood, recover metals

SITE A510405

TOWN OF HUNTSVILLE (STEPHENSON SITE)

LOT 20, CONCESSION 4,

STEPHENSON WARD

A510405 TOWN OF HUNTSVILLE, (STEPHENSON SITE),
LOT 20, CONCESSION 4, STEPHENSON WARD

DATE OF SITE INSPECTION: July 9, 1975

INTRODUCTION

This 15 acre site receives 80% domestic wastes, 10% commercial-industrial wastes, along with 10% brush, metals and appliances from part of the Town of Huntsville (population 10,000). The wastes are disposed basically in a trench and fill operation. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

This site is located on a flat beach deposit of fine sand with 7 feet of sand exposed in the trench. Approximately 4000 feet separates the site from the nearest watercourse, which is the Muskoka River, the nearest well is 2,500 feet away. Considering the travel distance involved, the impact on local water resources is minimal.

SITE OPERATION

The waste is dumped into a 10 by 60 foot trench about 7 feet deep. Although adequate supplies of sand for cover material are found at the site the refuse is burnt and covered infrequently. The practice of burning should be discontinued, further the dumping area should be confined by portable fencing to a portion of the trench in order to make the application of cover more efficient.

CONCLUSIONS AND RECOMMENDATIONS

The site is clean, but burnt refuse is left uncovered and allowed to smolder. A large pile of metal exists on site and should be removed.

The site is remote and no impact on water resources is anticipated. The site is hydrogeologically suitable if, however, the dumping area is confined and cover applied more frequently the operation can be improved to a great extent.



LANDFILL SITE DATA SUMMARY

SITE NAME: Town of Huntsville

FILE NO.: A-510405

LOCATION (Lot, Con., Twp., County): Lot 20, Conc. 4, Stephenson Ward

OWNER (Name, Address, Phone No.): Town of Huntsville, Box 269, 37 Main Street East

OPERATOR: C. Chataway, Road Superintendent

PHONE NO.: 705-789-5575

A) SITE DETAILS

AREA:	15	Acres	AREA FOR USE:	2	Acres	LIFETIME:	4 Years	DATE OPENED:	1971
PRIOR LAND USE:	sand pit			FUTURE USE:			Agriculture		

B) WASTES DISPOSED

QUANTITIES:	20	Tons/Wk	0	Gallons/Wk	DISPOSAL PERIOD:				always open
DOMESTIC:	90	%	COMMERCIAL:	0	%	INDUSTRIAL:	0	%	LIQUID: 0 %
AGRICULTURAL:	0	%	HAZARDOUS:	0%	HAULED SEWAGE:	0	%	OTHER (SPECIFY):	10% brushy, wood, metals, appliances etc.

C) SITE REVIEW:

MUNICIPALITIES SERVED: Town of Huntsville

POPULATION 10,000

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:
 NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat beach deposit

SOIL, DRAINAGE: sand & sandy loam good drainage

OVERBURDEN - TYPE, THICKNESS: fine sand, 7 feet plus

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Muskoka River, good drainage

NEAREST WATERCOURSE: 4,000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,500	ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
			<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 10 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 7 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 5 ft.

NATURE, THICKNESS OF COVER MATERIAL:

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: trench to 10 ft. X 60 ft. X 7 ft. deep refuse is dumped into a trench to be covered on a regular basis, adequate supplies of sand exist at the site, but sufficient cover is not applied, garbage is burned rather than covered.

J) CONCLUSIONS: site is clean, but refuse has been burned and remains uncovered, an unacceptably large site of metal exists on the site and should be removed, site is remote and no import on water resources is anticipated, hydrogeologically the site is good, with upgrading site ideal

K) RECOMMENDATIONS:

- stop burning
- confine dumping area
- cover garbage bi-weekly
- reduce metals pile

**SITE A510501
TOWNSHIP OF GEORGIAN BAY
LOT 26, CONCESSION 6,
BAXTER WARD**

A510501 TOWNSHIP OF GEORGIAN BAY, LOT 26, CONCESSION 6,
BAXTER WARD

DATE OF SITE INSPECTION: July 7, 1975

INTRODUCTION

This 41 acre site receives 75% domestic refuse, 15% commercial-industrial wastes and 10% metals, brush, wood, etc. from the Townships of Freeman, Gibson, and Baxter on a 24 hr/day basis. It serves as a major site for the Georgian Bay area with an estimated population of 1,500 using the site year round. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Topographically the area is relatively rough being made up of precambrian granitic knobs infilled with fluvial sands and muck soils. The topography is somewhat subdued by this infilling feature and it is on the flat area between knobs that the site is located. The overburden material underlying the site is sand. Drainage is good, however, because of the nature of the bedrock surface, sand pockets are found completely surrounded by bedrock resulting in land locked swamps in low areas. Muck soils have developed here with poor drainage.

While wet areas are found adjacent to the site, the nearest water course is approximately 2,500 feet away. No well water users are located in the area.

SITE OPERATION

Operation

The site is operated by using a modified trench and fill operation, locally obtained sand is used to cover the refuse once weekly. The gate to the site was unmarked, unlocked and unattended. At the time of the site investigation, volumes of refuse in the trench remained uncovered with the result that there were problems of offensive odours, scavenging and blowing paper. Access for vehicles is limited.

CONCLUSIONS AND RECOMMENDATIONS

Hydrogeologically suitable, the operation of this site requires upgrading. The site should be cleaned up and metals should be buried or hauled away, in addition more frequent compaction and cover application is necessary. The general housekeeping could be improved by employing a part time attendant at the site.



Ministry of the
Environment

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LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Georgian Bay

FILE NO.: A510501

LOCATION (Lot, Con., Twp., County): Lot 26, Conc. 6, Baxter Ward

OWNER (Name, Address, Phone No.): Township of Georgian Bay, R.R. #1, Port Severn

OPERATOR: A. Hedlund, Road Superintendent

PHONE NO.: 705-538-2337

A) SITE DETAILS

AREA:	4.1 Acres	AREA FOR USE:	2 Acres	LIFETIME:	20 Years	DATE OPENED:	1971
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PRIOR LAND USE:	open land	FUTURE USE:	open space
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B) WASTES DISPOSED

QUANTITIES:	15 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	90 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	10% metals, brush, wood, etc.
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Georgian Bay

POPULATION 1,500

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: rough-granite knobs & depression, infilled with sand

SOIL, DRAINAGE: sandy loam and muck soils

OVERBURDEN - TYPE, THICKNESS: sands and muck

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to land-locked swamps

NEAREST WATERCOURSE: 200 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	5,000 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 3 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 6.5 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, infrequently covered

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: modified trench and fill operation site poorly managed, sufficient sand on site to cover weekly, gate unmarked, unlocked and unattended, large amount of uncovered garbage in trench, odours and scavengers are problems, access for cars limited, great volumes of blowing paper

J) CONCLUSIONS: hydrogeologically the site is fine but management needs definite improvements
-no burning seen on site
-site could be ideal with better management, its remote and should cause no water user problem

K) RECOMMENDATIONS:

-site should be cleaned up and metals should be burned or hauled away
-more frequent cover and compaction
-employ part time attendant
-restrict dumping times and area

**SITE A510505
TOWNSHIP OF GEORGIAN BAY
LOT 11, CONCESSION 4,
FREEMAN WARD**

A510505 TOWNSHIP OF GEORGIAN BAY, LOT 11,
CONCESSION 4, FREEMAN WARD

DATE OF SITE INSPECTION: July 7, 1975

INTRODUCTION

This 5 acre site receives 75% domestic wastes along with 25% commercial-industrial wastes on a 24 hr/day basis from MacTier and Freeman Ward (population 400) at an estimated rate of 4 tons/week. This site is a mess with refuse strewn randomly with no attempt made to cover and pile it. The site should be upgraded or closed. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Located on a hummocky precambrian peneplain of granite bedrock, the site is underlain by virtually no soil or overburden. The nearest surface water body is Lake Joseph approximately 2500 feet away and the nearest bedrock wells are 1300 feet away. Groundwater movement is through fractures in the bedrock and difficult to predict.

SITE OPERATION

The site is badly operated with no compacting, confinement, and cover. In addition there is no gate and attendant. Refuse is spread all over the property immediately adjacent to the access road.

CONCLUSIONS AND RECOMMENDATIONS

The site is a problem esthetically but not a major hazard for local water resources, primarily due to the fact that it is remote from water users. The site should be covered, compacted, and the dumping area restricted or it should be closed. Finally, groundwater quality from the bedrock wells should be checked periodically to anticipate possible contamination.



LANDFILL SITE DATA SUMMARY

Ontario

SITE NAME: Township of Georgian Bay

FILE NO.: A-510505

LOCATION (Lot, Con., Twp., County): Lot 11, Conc. 4, Freeman Ward

OWNER (Name, Address, Phone No.): Township of Georgian Bay, R.R. #1, Port Severn

OPERATOR: A. Hedlund, Road Superintendent

PHONE NO.: 705-538-2337

A) SITE DETAILS

AREA:	5 Acres	AREA FOR USE:	5 Acres	LIFETIME:	50 Years	DATE OPENED:	1972
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PRIOR LAND USE:	-	FUTURE USE:
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B) WASTES DISPOSED

QUANTITIES:	4 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open	
DOMESTIC:	100 %	COMMERCIAL:	0 % INDUSTRIAL:	0 % LIQUID:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 % HAULED SEWAGE:	0 % OTHER (SPECIFY):	0

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Georgian Bay

POPULATION 400

CONSULTANT'S REPORT:	<input type="checkbox"/> YES	CONSULTANT'S NAME:
	<input checked="" type="checkbox"/> NO	

DISTRICT OFFICE REPORT:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	SITE PROBLEMS/COMPLAINTS:
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CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: hummocky precambrian peneplain

SOIL, DRAINAGE: no soil

OVERBURDEN - TYPE, THICKNESS: no overburden

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to Lake Joseph, run-off - limited drainage

NEAREST WATERCOURSE: 2500 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	1500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
		<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.:

DEPTH TO OVERBURDEN AQUIFER AND TYPE: ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 2 ft.

NATURE, THICKNESS OF COVER MATERIAL:

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site a mess

no compacting, no confinement, no cover, no gate, no attendant, garbage is spread all over the property which is flat and immediately adjacent to the access road.

J) CONCLUSIONS: esthetic problem

not a major hazard for local water resources - remote from users

K) RECOMMENDATIONS: - site should be covered, compacted and the dumping area restricted or closed, the quality of local rock wells should be checked to confirm the above

**SITE A510601
TOWNSHIP OF LAKE OF BAYS
LOT 4, CONCESSION 5
SINCLAIR WARD**

A510601 TOWNSHIP OF LAKE OF BAYS (SINCLAIR SITE)
LOT 4, CONCESSION 5, SINCLAIR WARD

DATE OF SITE INSPECTION: July 3, 1975

INTRODUCTION

This one acre site receives 90% domestic refuse and 10% metals, brush, and wood, from Sinclair Ward (population 200). It is operated as a dump in an excavated trench. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Located in a natural ravine that has been modified by excavation, the site is underlain by well drained sand and gravel deposits. Approximately 900 feet below the dumping area at the bottom of the ravine, a creek rises and flows into Seventeen Mile Lake. Drainage from the site runs into the creek. There are no provisions at the site for surface water control.

SITE OPERATION

Using an open ended trench, with the down slope end open, the site is operated in a very poor manner. No segregation of refuse takes place, there is no compaction, confinement or cover and there is no attendant at the site. Refuse is simply tossed into the trench to be spread over the area by bears and left to decompose with the associated problems of odour, flies, rodents and birds. In spite of the fact that adequate cover material is available, burning is employed as method of reduction.

CONCLUSIONS AND RECOMMENDATIONS

Aside from the problems of scavenging bears, flies and odours, a water quality problem may exist in the stream that flows from the property. The stream should be monitored at least once a year. While the site is small and remote, its operation is unsatisfactory and should be improved. A berm at the down gradient end of the trench, or a new trench at right angles to the existing one should be installed. The wastes should be covered weekly during the vacation season and monthly during the remaining portion of the year. Burning of refuse should be discontinued and an attendant should also be employed at the site to direct dumping.



LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lake of Bays

FILE NO.: A510601

LOCATION (Lot, Con., Twp., County): Lot 4, Conc. 5, Sinclair Ward

OWNER (Name, Address, Phone No.): Township of Lake of Bays, Dwight, Ontario.

OPERATOR: G. Lupton, Road Superintendent

PHONE NO.: 705-635-2272

A) SITE DETAILS

AREA: 1 Acres AREA FOR USE: 1 Acres LIFETIME: indef years DATE OPENED: 1972

PRIOR LAND USE: - FUTURE USE: dump

B) WASTES DISPOSED

QUANTITIES:	2 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open		
DOMESTIC:	90 %	COMMERCIAL:	0 %	INDUSTRIAL:	0 %
AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %
			OTHER (SPECIFY): 10%		

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lake of Bays

POPULATION 200

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: site located in a natural ravine

SOIL, DRAINAGE: sandy loam, good drainage

OVERBURDEN – TYPE, THICKNESS: sand and gravel

BEDROCK – TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY – SURFACE WATER:

DRAINAGE: to a creek which drains into Seventeen Mile Lake

NEAREST WATERCOURSE: 900 ft.

F) HYDROLOGY – GROUNDWATER:

NEAREST WELL: 2,500 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M. BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: slight

BEDROCK AQUIFER: slight

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 10 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 2 ft.

NATURE, THICKNESS OF COVER MATERIAL: none

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: open ended trench, down slope end being open, site operated in a very poor manner, no segregation of refuse takes place, no compaction, confinement or cover, no attendant at the site, burning is frequently the bulk reduction method, sufficient cover is available on site.

J) CONCLUSIONS: quality problem may exist in the downgradient stream which will receive any leachate or spring runoff, site is small and remote, garbage should be covered weekly during summer, burning at site should be discontinued.

K) RECOMMENDATIONS:

- downgradient surface water quality should be checked
- stop burning and start covering garbage
- put in berm at end of trench or dig a new trench at 90° to grade
- cover garbage weekly during summer
- employ an attendant at the site to direct dumping, clean-up the site and keep bears away

SITE A510602
TOWNSHIP OF LAKE OF BAYS
LOT 17, CONCESSION 9,
MCLEAN WARD

A510602 TOWNSHIP OF LAKE OF BAYS (MCLEAN SITE) LOT 17,
CONCESSION 9, MCLEAN WARD

DATE OF SITE INSPECTION: July 13, 1975

INTRODUCTION

This one acre site receives 95% domestic refuse and 5% brush, wood and metals from part of the Township of Lake of Bays (population 200). It has a history of being a poorly operated dump, but at the time of this site inspection, the site was in good condition. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

Topographically the area is hilly with fair relief and situated on the edge of a heavily wooded valley. The surficial sand on site is probably glacial-lacustrine in origin with little soil development, the sand is variable in thickness and overlies Precambrian granites and gneisses.

The sand is well drained and the site dry and remote from springs and surface water courses, the valley bottom also appeared to be dry.

The site is approximately 2,000 feet from the nearest well.

SITE OPERATION

The site is operated using a ramp method with wastes being tossed over a 15 foot rise. From there it is spread and covered with locally obtained sand. There is little segregation of the refuse, and no attendant or gate. Because of the height of the face, this area cannot be covered, however, since the width of the face is restricted to a width of 40 feet, refuse confined to the base of the face could be covered with a minimum amount of cover material.

CONCLUSIONS AND RECOMMENDATIONS

Leachate formed will flow northward and then east to Lake of Bays. Because of the travel distance through sandy material that is involved and the relatively small size of the site, no water quality problems are expected. The dumping face is well confined, cover is adequate and the site reasonably clean.



LANDFILL SITE DATA SUMMARY

Ontario

SITE NAME: Township of Lake of Bays

FILE NO.: A510602

LOCATION (Lot, Con., Twp., County): Lot 17, Conc. 9, McLean Ward

OWNER (Name, Address, Phone No.): Township of Lake of Bays, Dwight, Ontario

OPERATOR: G. Lupton, Road Superintendent

PHONE NO.: 705-635-2272

A) SITE DETAILS

AREA:	1 Acres	AREA FOR USE:	1 Acres	LIFETIME: indef	YEARS	DATE OPENED: 1971(?)
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PRIOR LAND USE: brush FUTURE USE: brush

B) WASTES DISPOSED

QUANTITIES:	0.5 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD: always open		
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DOMESTIC:	95 %	COMMERCIAL:	5 %	INDUSTRIAL:	5 %	LIQUID:	5 %
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AGRICULTURAL:	5%	HAZARDOUS:	5 %	HAULED SEWAGE:	5 %	OTHER (SPECIFY)	5%
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lake of Bays

POPULATION 200

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: hilly with a good amount of relief

SOIL, DRAINAGE: sandy loam with good drainage

OVERBURDEN - TYPE, THICKNESS: glacial-lacustrine sand

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: good drainage, to Lake of Bays

NEAREST WATERCOURSE: 1,000 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,500 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 10 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: east south east

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 5 ft.

NATURE, THICKNESS OF COVER MATERIAL: sand, locally obtained

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: ramp method with garbage being tossed over a 15 foot rise, then spread and covered with locally obtained sand, no segregation of refuse, no attendant and no gate, because of the height of the face this area can't be covered, face is restricted to a width of about 40 feet.

J) CONCLUSIONS: any leachate formed will flow northward and then east to Lake of Bays, but travel distance through sand from small site will rectify any leachate problems. Dumping face is well confined, cover is adequate, site is reasonably clean.

K) RECOMMENDATIONS:

-better cover could be applied if garbage wasn't spread so thin; use cells of limited dimensions for more efficient use of cover

SITE A510604

TOWNSHIP OF LAKE OF BAYS

LOT 3, CONCESSION 8

FRANKLIN WARD

A510604 TOWNSHIP OF LAKE OF BAYS (FRANKLIN SITE),
LOT 3, CONCESSION 8, FRANKLIN WARD

DATE OF SITE INSPECTION: July 3, 1975

INTRODUCTION

This one acre site receives 90% domestic refuse along with 10% brush, wood and scrap metals on a 24 hr/day basis from Franklin Ward (population 2,000). The site has a history of being poorly operated. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located in an old sand pit containing outwash sands and gravels 4 to 5 feet thick, and underlain by stratified clean beach sands. About 20 feet of this material is exposed above the water table. As a result of the excavations due to mining, the toe of the fill now rests in a swampy depression which drains from the area. Locally drainage is good, leachate that is formed will migrate to the swamp. There are no down gradient well water users.

SITE OPERATION

The site is operated using the ramp method with unsegregated wastes tossed over the ramp's edge to the floor of the fill. From there it is distributed over the floor and sand cover is applied every two months. At the time of inspection the refuse was burning which appears to be a common practice. Because of the high water table adjacent to the swamp, the base of the refuse is evidently saturated.

CONCLUSIONS AND RECOMMENDATIONS

Surface water contamination appears to be taking place on site, however, movement in the swamp is slow and renovation of the leachate will be reasonably complete. Because of the burning of the refuse, unacceptable air borne pathogens and odours are released.

It is recommended that burning be discontinued, that the refuse be compacted more thoroughly and adequate cover material be applied. It is important that the dumping face be kept back from the swamp. Surface water downstream should be sampled and analyzed and appropriate steps taken if contamination or the potential for contamination exists.



Ministry of the
Environment

LANDFILL SITE DATA SUMMARY

SITE NAME: Township of Lake of Bays

FILE NO.: A510604

LOCATION (Lot, Con., Twp., County): Lot 3, Conc. 8, Franklin Ward

OWNER (Name, Address, Phone No.): Township of Lake of Bays, Dwight, Ontario

OPERATOR: G. Lupton, Road Superintendent

PHONE NO.: 705-635-2272

A) SITE DETAILS

AREA:	1 Acres	AREA FOR USE:	1 Acres	LIFETIME: indef	YEARS	DATE OPENED:	1972
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PRIOR LAND USE:	-	FUTURE USE:	-
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B) WASTES DISPOSED

QUANTITIES:	5 Tons/Wk	0 Gallons/Wk	DISPOSAL PERIOD:	always open
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DOMESTIC:	90 %	COMMERCIAL:	0%	INDUSTRIAL:	0 %	LIQUID:	0 %
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AGRICULTURAL:	0 %	HAZARDOUS:	0 %	HAULED SEWAGE:	0 %	OTHER (SPECIFY):	10% brush, scrap, metals, etc.
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C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lake of Bays

POPULATION 2,000

CONSULTANT'S REPORT: YES CONSULTANT'S NAME:

NO

DISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS:

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: flat sand plain

SOIL, DRAINAGE: sandy loam and muck, good to poor drainage

OVERBURDEN - TYPE, THICKNESS: sand and gravel, outwash deposit

BEDROCK - TYPE, DEPTH: precambrian granites and gneisses

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to swamp at toe of fill

NEAREST WATERCOURSE: 50 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL:	2,600 ft.	<input type="checkbox"/> OVERBURDEN DEPTH:	ft.	YIELD:	G.P.M.
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<input type="checkbox"/> BEDROCK DEPTH:	ft.	YIELD:	G.P.M.
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NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 2 ft. CONFINED UNCONFINED

DEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: needs further sampling

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: 0 ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: 5 ft.

NATURE, THICKNESS OF COVER MATERIAL:

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: site operated on a ramp basis with unseparated refuse being tossed over the ramp's edge to the fill floor, then it is distributed over the fill floor on a two-week basis, sand cover applied 2 months, refuse is commonly burned, high water table

J) CONCLUSIONS: contamination of swamp is possible, but renovation of leachate in swamp will be reasonably complete, burning of garbage is unacceptable, site is remote from groundwater users

K) RECOMMENDATIONS:

-stop burning garbage

-increase amount of cover and frequency of cover application

-test downstream waters

**SITE A510605
TOWNSHIP OF LAKE OF BAYS
LOT 26, CONCESSION 9
RIDOUT WARD**

A510605 TOWNSHIP OF LAKE OF BAYS (RIDOUT SITE),
RIDOUT WARD, CONCESSION 9, LOT 26
Ward, Concession 9, Lot 26

DATE OF SITE INSPECTION: July 3, 1975

INTRODUCTION

This half acre site receives 95% domestic wastes and 5% brush, wood and metals from Ridout Ward (population 200) on a 24 hr/day basis. The site can be classified as a dump which under existing condition cannot be effectively covered. No consultant's report or plan exists for the site which has received a provisional certificate of approval.

HYDROGEOLOGY

The site is located in a ravine carved from the granite bedrock depression. There is no overburden or soil cover material on site. Down gradient, about 500 feet from the site is a marshy, land locked swamp which probably receives runoff water and leachate from the site. There are no well water users in the area.

SITE OPERATION

Using the ravine as a receiving area, refuse is thrown from a ramp at the edge of the ravine and is left uncovered most of the time. Sand must be trucked in and is rarely done. Thus the associated problems of odours and scavengers along with blowing papers plague the site.

CONCLUSIONS AND RECOMMENDATIONS

The site is in a good location but receives no cover and is difficult to manage. There is a down gradient wet area which could be affected by leachate but to a minimal degree because of the limited size of the site and the travel distance involved. The site is well screened from the road.

Burning has been limited but without adequate cover available it is suggested that the site be closed.



LANDFILL SITE DATA SUMMARY

Ontario

SITE NAME: Township of Lake of Bays

FILE NO.: A510605

LOCATION (Lot, Con., Twp., County):

OWNER (Name, Address, Phone No.): Township of Lake of Bays, Dwight, Ontario

OPERATOR: G. Lupton, Road Superintendent

PHONE NO.: 705-635-2272

A) SITE DETAILS

AREA: 0.5 Acres AREA FOR USE: 0.5 Acres LIFETIME: indef years DATE OPENED: 1972

PRIOR LAND USE: - FUTURE USE: -

B) WASTES DISPOSED

QUANTITIES: 0.5 Tons/Wk 0 Gallons/Wk DISPOSAL PERIOD: always open

DOMESTIC: 95 % COMMERCIAL: 0% INDUSTRIAL: 0 % LIQUID: 0 %

AGRICULTURAL: 0% HAZARDOUS: 0 % HAULED SEWAGE: 0 % OTHER (SPECIFY): 5%
brush, wood, etc.

C) SITE REVIEW:

MUNICIPALITIES SERVED: Township of Lake of Bays

POPULATION 200

CONSULTANT'S REPORT: YES CONSULTANT'S NAME: _____ NODISTRICT OFFICE REPORT: YES NO SITE PROBLEMS/COMPLAINTS: _____

CONDITIONS OF APPROVAL: none

D) GEOLOGY:

TOPOGRAPHY, PHYSIOGRAPHY: hilly, site in a ravine in the granite bedrock

SOIL, DRAINAGE: none

OVERBURDEN - TYPE, THICKNESS: none

BEDROCK - TYPE, DEPTH: precambrian granite

E) HYDROLOGY - SURFACE WATER:

DRAINAGE: to downgradient marsh

NEAREST WATERCOURSE: 500 ft.

F) HYDROLOGY - GROUNDWATER:

NEAREST WELL: 2500 ft. OVERBURDEN DEPTH: ft. YIELD: G.P.M. BEDROCK DEPTH: ft. YIELD: G.P.M.

NUMBER OF WELLS WITHIN 1000 FT.: 0

DEPTH TO OVERBURDEN AQUIFER AND TYPE: 5 ft. CONFINED UNCONFINEDDEPTH TO BEDROCK AQUIFER AND TYPE: ft. CONFINED UNCONFINED

NATURE, THICKNESS OF CONFINING LAYER:

DIRECTION OF GROUNDWATER FLOW: south-west

EFFECT OF SITE ON OVERBURDEN AQUIFER: limited

BEDROCK AQUIFER: limited

G) WATER QUALITY:

SAMPLING AT SITE: YES NO SAMPLING IN VICINITY: YES NO

CHEMICAL ANALYSIS AVAILABLE: YES NO

BACKGROUND GROUNDWATER QUALITY: good

LOCAL GROUNDWATER QUALITY: unknown

SAMPLING PROGRAM RECOMMENDATIONS: none

H) SITE ENGINEERING:

DEPTH FROM ORIGINAL SURFACE TO BOTTOM OF WASTE: - ft.

DEPTH FROM ORIGINAL SURFACE TO TOP OF FILL: - ft.

NATURE, THICKNESS OF COVER MATERIAL: none

LINER OR DRAINAGE TILES USED: YES NO IF YES DESCRIBE:

LEACHATE COLLECTION/TREATMENT: YES NO IF YES DESCRIBE:

I) OPERATIONAL PROCEDURES: ravine in bedrock is the receiving area, garbage is thrown from a ramp at the edge of the ravine and is left uncovered, cover sand is rarely trucked in, associated problems with uncovered garbage, some burning takes place, no attendant no gate

J) CONCLUSIONS: site in a good location, it is remote and there are no downgradient wells. It receives cover and is difficult to manage, site limited in size and probably won't affect downgradient swamp, site well hidden from road.

K) RECOMMENDATIONS:

-site should be closed because of lack of cover and compaction

-with no cover available on site it is adviseable to find another site

SITE A510716

TOWNSHIP OF MUSKOKA LAKES (GLEN ORCHARD SITE)

LOT 16, CONCESSION 4

MEDORA WARD

A510716 TOWNSHIP OF MUSKOKA LAKES (GLEN ORCHARD SITE)
TOWNSHIP OF MEDORA WARD, CONCESSION 4, LOT 16

DATE OF SITE INSPECTION: July 8, 1975

INTRODUCTION

This 5 acre site receives 90% domestic waste, 5% commercial wastes and 5% brush, wood and metals from the Townships of Muskoka Lakes, Port Carling, Bala, Torrance, (population 3,700). The site is clean and well managed.

HYDROGEOLOGY

The site is located on hummocky land that is infilled with glacio-fluvial sands and clays that have given rise to swamps and wet lands. These infilled areas have variable thicknesses of sand, silt and clay. Drainage is fairly good, the nearest watercourse is approximately 5,000 feet away and there are no groundwater users in the vicinity. The threat to local water resources is negligible.

SITE OPERATION

The site is neat and clean. It is covered daily by an attendant who is on duty during dumping hours. A front-end loader is on site at all times and the locally obtained sandy silt is used for cover.

CONCLUSIONS AND RECOMMENDATIONS

Hydrogeologically the site is ideal. Although short on cover material, the site could be used further by hauling in cover. The site is well managed and clean but is now closed due to the unavailability of cover material.

Summary and Conclusions

Summarizing almost half of the operating sites in the Muskoka-Haliburton District have a history of problems and complaints.

The majority of the sites are small and remote and therefore have little detrimental impact on the environment. However, the operation of these sites can and should be upgraded.

Approximately at one third of the sites, refuse is disposed directly into a surface water body. In most cases the receiving water body is a confined swamp, that results in contamination of these waters. The drainage pattern in PreCambrian areas is a series of swampy depressions partially confined, therefore, contamination is to an extent restricted, in addition

the swampy areas are biologically active with a reducing environment with a result that leachate is renovated to a considerable degree. At most of the sites, the water table is close to surface and there is locally contaminated ground water. The sites however, are located in all, but in one case, at least 1500 feet from wells and so far no ground-water users have been affected.

A total of seven sites require surface and/or ground water monitoring to ensure that there is no impairment to ground and surface waters.

Almost three fourths of the sites investigated are being operated with inadequate and/or infrequent cover application. At many, wastes are burnt rather than compacted and covered to reduce volume and odour problems. Eight of the sites, rated by the Le Grand system would be expected to contaminate the environment based on an assessment of hydrogeological characteristics.

RECOMMENDATIONS

In total, twenty-four sites require monitoring of surface and ground water quality, additional confinement, compaction and cover, cessation of burning, and a reduction in the slope and width of the working face.

In general the reports completed by the district staff contain sufficient guidelines for the upgrading of individual sites. It is, however, recommended that a stronger effort be made to confine, compact and cover sites and that steps be taken in the long range planning of waste disposal in the Region. Consideration should be given to establishing centrally located sites, adequately planned which could receive wastes from local transfer stations.

In conclusion waste disposal practices at some sites require upgrading to confirm to Ministry guidelines, if this is not possible, the sites should be properly closed. The disposal sites are as follows:

- A330602 Township of Monmouth, Lot 24, Concession 16
- A330702 Township of Sherborne, Lot 5, Concession 13
- A330704 Township of McClintock, Lot 23, Concession A
- A510402 Town of Huntsville (Chaffey Ward)
- A510604 Township of Lake of Bays (Franklin Ward)
- A510605 Township of Lake of Bays (Ridout Ward)

SUMMARY OF SITE CHARACTERISTICS
AND CONTAMINATION POTENTIAL
BASED ON THE LEGRAND SYSTEM

	A330101 Twp of Minden Con 4 Lot 10	A330104 Twp of Hindon Con A Lot 32	A330106 Twp of Minden Con I Lot 18	A330203 Twp of Cardiff Con 13 Lot 8
Total Area of Site (ac.)	20	1	9	5
Disposal Area (ac.)	1	1	2 1/2	0.5
Lifetime of Site (est.)	10 yrs	10 yrs	6+ yrs	indef.
Domestic Waste (%)	50%	90%	100%	100%
Commercial-Industrial (%)	50%	10%	0	0
Agricultural-Sewage (%)	0	0	0	0
Total Wastes (tons/wk)	0.5	0.5	3	0.5
Total Liquids (gal/wk)	0	0	0	0
Population served	2243	2243	2243	450
Consultant's Report	No	No	No	No
District Officer's Report	May/76	March/76	May/76	Closed
Site Approved	June/76	June/76	Nov/75	Oct/75
Problems/Complaints	No	No	No	Yes
Topography	flat	flat	flat	rolling
Soil	none	sand & clay	sand	sandy loam
Overburden	none	sand & clay	sand & gravel	sand & gravel
Bedrock	Precambrian	Precambrian	Precambrian	Precambrian
Dist. Nearest Watercourse	0'	0' (1000)	1000'	2500'
Surface Water Control	none	none	none	none
Site Affect On S.W.	impairment	impairment	none	none
Drainage Characteristics	poor	fair	good	good
Depth to Water Table	(est) 5 ft	(est) 5 ft	(est) 10 ft	(est) 10 ft
Dist. to Nearest Well	1500'+	1000	2500'	5000
No. of wells within 1000 ft.	0	0	0	0
Direction of flow of G.W.	NW	NE	NW	NE
Site effect on G.W.	limited	limited	limited	limited
Site Sampling Program	none	none	none	none
Analysis Results Available	no	no	no	no
Surface Water Quality	poor	poor	ok	ok
Ground Water Quality	?	?	ok	ok
Needs further Sampling	no	yes	no	no
Liner Used	no	no	no	no
Cover Material Adequate	no	no	no	no
Drainage Tiles	no	no	no	no
Leachate Collected/Treated	no	no	no	no
Collection/Treatment Plans	no	no	no	no
Leachate Monitoring ok	yes	no	yes	yes
LeGrand Rating Number	4.5	5.0	16	20
Contamination Potential	probable swamp at toe affected not	probable swamp at toe, check quality	improbable needs site cover	improbable no cover applied
Comments				

	A330204 Twp of Cardiff Con 22 Lot 11	A330205 Twp of Cardiff Con I Lot 5	A330302 Twp of Dysart Con 9 Lot 12	
Total Area of Site (ac.)	5	3	9.5	
Disposal Are (ac.)	0.5	0.5	1	
Lifetime of Site (est.)	indef.	10 yrs	10 yrs	
Domestic Waste (%)	75%	75%	95%	
Commercial-Industrial (%)	10%	10%	0	
Agricultural-Sewage (%)	15%	15%	5%	
Total Wastes (tons/wk)	0.5	1	5	
Total Liquids (gal/wk)	0	0	0	
Population served	450	450	2000	
Consultant's Report	No	No	No	
District Officer's Report	Jan/76	Oct/75	Nov/75	
Site Approved	Jan/76	July/74	Oct/75	
Problems/Complaints	No	No	Yes	
Topography	flat to rolling	flat	flat	
Soil	sandy loam	sand	sand	
Overburden	sand	sand	sand	
Bedrock	Pre-E Precambrian	Pre-E Precambrian	Pre-E Precambrian	
Dist. Nearest Watercourse	5000	1350	0 (4000)	
Surface Water Control	none	none	none	
Site Affect On S.W.	none	none	impairment	
Drainage Characteristics	good	good	poor	
Depth to Water Table	(est) 12 ft	(est) 5 ft	2'	
Dist. to Nearest Well	3000'	5000'	2000'	
No. of wells within 1000 ft.	0	0	0	
Direction of flow of G.W.	NW	SE	S	
Site Effect on G.W.	limited	limited	limited	
Site Sampling Program	none	none	none	
Analysis Results Available	no	no	no	
Surface Water Quality	ok	ok	poor	
Ground Water Quality	ok	ok	?	
Needs further Sampling	no	no	no	
Liner Used	no	no	no	
Cover Material Adequate	no	yes	no	
Drainage Tiles	no	no	no	
Leachate Collected/Treated	no	no	no	
Collection/Treatment Plans	no	no	no	
Leachate Monitoring ok	yes	yes	yes	
LeGrand Rating Number	18.5	17	14.5	
Contamination Potential	improbable	improbable	improbable	
Comments	stop burning, cover better	confine dumping	confine and cover local contamination	

	A330303-Twp of Harburn Con 8 Lot 11	A330304-Twp of Harburn Con 5 Lot 11	A330309-Twp of Guilford Con 3 Lot 6 & 7
Total Area of Site (ac.)	2.5	4	2
Disposal Area (ac.)	1	1	1
Lifetime of Site (est.)	10 yrs	10 yrs	10 yrs
Domestic Waste (%)	95%	95%	95%
Commercial-Industrial (%)	0	0	0
Agricultural-Sewage (%)	5%	5%	5%
Total Wastes (tons/wk)	3	3	3
Total Liquids (gal/wk)	0	0	0
Population served	400	400	400
Consultant's Report	No	No	No
District Officer's Report	Jan/76	Jan/76	Jan/76
Site Approved	Oct/75	No	Aug/76
Problems/Complaints	Yes	(ran out) Sept/75	Yes
Topography	rolling	rolling	rolling
Soil	none	none	sandy
Overburden	none	none	sand & gravel
Bedrock	Precambrian	Precambrian	Precambrian
Dist. Nearest Watercourse	0'	0'	1000
Surface Water Control	none	none	none
Site Affect On S.W.	local contam.	local contam.	limited
Drainage Characteristics	poor	poor	good
Depth to Water Table	?	?	10'+
Dist. to Nearest Well	10,000	10,000	2 miles
No. of wells within 1000 ft.,	0	0	0
Site Effect in G.W.	local	local	local
Direction of flow of G.W.	SE	ESE	NW
Site Sampling Program	none	none	none
Analysis Results Available	no	no	no
Surface Water Quality	poor	poor	ok
Ground Water Quality	?	?	?
Needs further Sampling	no	no	no
Liner Used	no	no	no
Cover Material Adequate	yes	yes	no
Drainage Tiles	no	no	no
Leachate Collected/Treated	no	no	no
Collection/Treatment Plans	no	no	yes
Leachate Monitoring ok	yes	yes	yes
LeGrand Rating Number	4	4	12.5
Contamination Potential	probable	probable	improbable
Comments	localized swamp contamination	localized swamp contamination	reduce face, confine and cover

	A330401-Twp of Glamorgan Con 5 Lot 30	A330501-Twp of Lutterworth Con 13 Lot 17	A330503-Twp of Lutterworth Con 3 Lot 30	
Total Area of Site (ac.)	1	5	2	
Disposal Are (ac.)	5 yrs	20 yrs	10 yrs	
Lifetime of Site (est.)	80%	95%	100%	
Domestic Waste (%)	15%	5%	0	
Commercial-Industrial (%)	5%	0	0	
Agricultural-Sewage (%)	1	5	0.5	
Total Wastes (tons/wk)	0	0	0	
Total Liquids (gal/wk)	400	900	900	
Population served	No	No	No	
Consultant's Report	Jan/76	Oct/75	?	
District Officer's Report	Aug/75	Nov/74	?	
Site Approved	Yes	None	None	
Problems/Complaints	flat	flat	flat	
Topography	sand	sand	sand	
Soil	sand	sand	sand	
Overburden	Precambrian	Precambrian	Precambrian	
Bedrock	300	200	1000	
Dist. Nearest Watercourse	none	none	none	
Surface Water Control	slight	slight	limited	
Site Affect On S.W.	good	good	good	
Drainage Characteristics	10'(est)	(est) 5'	(est) 5'	
Depth to Water Table	1500	3000	1500	
Dist. to Nearest Well	0	0	0	
No. of wells within 1000 ft.	local	local	local	
Direction of flow of G.W.	S	E	SE	
Site Effect on G.W.	none	none	none	
Site Sampling Program	no	no	no	
Analysis Results Available	ok	fair	ok	
Surface Water Quality	?	?	?	
Ground Water Quality	no	no	no	
Needs further Sampling	no	no	yes	
Liner Used	no	yes	yes	
Cover Material Adequate	no	no	no	
Drainage Tiles	no	no	no	
Leachate Collected/Treated	no	no	no	
Collection/Treatment Plans	yes	yes	yes	
Leachate Monitoring ok	13	11	14	
LeGrand Rating Number	improbable	possible	improbable	
Contamination Potential	stop burning, confine and cover	compact, confine, cover	well operated	
Comments				

	A330505-Twp of Lutterworth Con 9 Lot 22	A330507-Twp of Lutterworth Con 2 Lot 1	A330602-Twp of Monmouth Con 10 Lot 24	A330702-Twp of Sherborne Con 13 Lot 5
Total Area of Site (ac.)	5	unlimited, crown	20	5
Disposal Area (ac.)	1	1	1	1
Lifetime of Site (est.)	25 yrs	20 yrs	30 yrs	5 yrs
Domestic Waste (%)	0	100%	75%	80%
Commercial Industrial (%)	100%	0	20%	10%
Agricultural Sewage (%)	0	0	5%	10%
Total Wastes (tons/wk)	1	1 (est)	4	1
Total Liquids (gal/wk)	0	0	0	0
Population served	private	100	700	~500
Consultant's Report	No	No	No	No
District Officer's Report	Nov/75	Oct/75	May/76	May/76
Site Approved	Dec/75	Oct/75	Feb/76	Jan/75
Problems/Complaints	No	Yes	Yes	Yes
Topography	flat	flat	hilly	hilly
Soil	sand	sand	sand	sand
Overburden	till	sand	till	sand/gravel
Bedrock				
Dist. Nearest Watercourse	4000	0	200	800
Surface Water Control	No	No	No	No
Site Affect On S.W.	none	contam.	contam.	slight
Drainage Characteristics	good	fair	good	good
Depth to Water Table	est 5'	3' est	2' est	15' est
Dist. to Nearest Well	4000	2000	5000	1500'+
No. of wells within 1000 ft.,	0	0	0	0
Site Effect on G.W.	local	contam.	local	local
Direction of flow of G.W.	SE	SE	NNW	SW
Site Sampling Program	none	none	none	none
Analysis Results Available	no	no	no	no
Surface Water Quality	ok	poor	poor	ok
Ground Water Quality	ok	poor	?	?
Needs further Sampling	no	yes	yes	no
Liner Used	no	no	no	no
Cover Material Adequate	no	no	no	yes
Drainage Tiles	no	no	no	no
Leachate Collected/Treated	no	no	no	no
Collection/Treatment Plans	no	no	no	no
Leachate Monitoring ok	yes	no	no	yes
LeGrand Rating Number	19	5	10	13
Contamination Potential	improbable	probable	possible	improbable
Comments	construction materials, no problems.	upgrade or close	upgrade or close	upgrade or close

	A330704-Twp of McClintock Con A Lot 23	A330801-Twp of Snowdon Con 13 Lot 20	A330802-Twp of Snowdon Con 6 Lot 25
Total Area of Site (ac.)	5	4	50
Disposal Are (ac.)	1	1	20
Lifetime of Site (est.)	?	10 yrs	50 yrs
Domestic Waste (%)	95%	90%	100%
Commercial-Industrial (%)	5%	10%	0
Agricultural-Sewage (%)	0	0	0
Total Wastes (tons/wk)	0.5	2(est)	1
Total Liquids (gal/wk)	0	0	0
Population served	300	475	300
Consultant's Report	No	No	No
District Officer's Report	May/76	May/76	May/76
Site Approved	Apr/76	Feb/76	Aug/74
Problems/Complaints	Yes	No	No
Topography	hummocky	hilly	flat
Soil	sand	sand	sand
Overburden	none	sand	sand
Bedrock			
Dist. Nearest Watercourse	0'	6000	1000
Surface Water Control	No	No	No
Site Affect On S.W.	contam.	none	none
Drainage Characteristics	good	good	good
Depth to Water Table	3' est	5' est	7' est
Dist. to Nearest Well	400	3000	3000
No. of wells within 1000 ft.	1	0	0
Direction of flow of G.W.	local	local	limited
Site Effect on G.W.	SE	S	S
Site Sampling Program	none	none	none
Analysis Results Available	no	no	no
Surface Water Quality	poor	ok	ok
Ground Water Quality	?	?	?
Needs further Sampling	no	no	no
Liner Used	no	no	yes
Cover Material Adequate	no	no	no
Drainage Tiles	no	no	no
Leachate Collected/Treated	no	no	no
Collection/Treatment Plans	no	yes	yes
Leachate Monitoring ok	yes	yes	yes
LeGrand Rating Number	3	14.5	15
Contamination Potential	imminent	improbable	improbable
Comments	upgrade or close	improve housekeeping	good site

A330901-Twp of
Stanhope
Con 9 Lot 8

A330902-Twp of
Stanhope
Con 5 Lot 2

Total Area of Site (ac.)	5	10	
Disposal Area (ac.)	2	2	
Lifetime of Site (est.)	20 yrs	40 yrs	
Domestic Waste (%)	90%	90%	
Commercial Industrial (%)	5%	5%	
Agricultural Sewage (%)	5%	5%	
Total Wastes (tons/wk)	2	2	
Total Liquids (gal/wk)	0	0	
Population served	750	750	
Consultant's Report	No	No	
District Officer's Report	May/76	May/76	
Site Approved	Feb/76	Oct/74	
Problems/Complaints	no	no	
Topography	flat	flat	
Soil	none	sand	
Overburden	none	sand & gravel	
Bedrock	Precambrian	Precambrian	
Dist. Nearest Watercourse	0'	1800	
Surface Water Control	no	no	
Site Affect On S.W.	none	none	
Drainage Characteristics	fair	good	
Depth to Water Table	10' (est)	7' (est)	
Dist. to Nearest Well	1800 ft	1800 ft	
No. of wells within 1000 ft..	0	0	
Site Effect on G.W.	limited	limited	
Direction of flow of G.W.	SW	S	
Site Sampling Program	none	none	
Analysis Results Available	no	no	
Surface Water Quality	contam.	ok	
Ground Water Quality	ok	ok	
Needs further Sampling	no	no	
Liner Used	no	no	
Cover Material Adequate	no	no	
Drainage Tiles	no	no	
Leachate Collected/Treated	no	no	
Collection/Treatment Plans	no	no	
Leachate Monitoring ok	yes	yes	
LeGrand Rating Number	4.5	15.5	
Contamination Potential	probable	improbable	
Comments	restrict dumping, cover.	cover and compact.	

	A510204-Town of Bracebridge-Twp of Macaulay Lot 9 Con 3	A510307-Town of Gravenhurst Morrison Ward	A510402-Town of Huntsville Chaffey Ward	A510405-Town of Huntsville Stephenson Ward
Total Area of Site (ac.)	515	50	20	15
Disposal Area (ac.)	40	30	5	2
Lifetime of Site (est.)	23 yrs	10 yrs	6-months-2 yrs	2-4 yrs
Domestic Waste (%)	65%	80%	30%	80%
Commercial-Industrial (%)	35%	20%	60%	10%
Agricultural-Sewage (%)	0	0	10%	10%
Total Wastes (tons/wk)	75	65	75(est)	20(est)
Total Liquids (gal/wk)	0	0	0	0
Population served	8000	6800	10,000	10,000
Consultant's Report	no	July/73	no	no
District Officer's Report	Feb 20/76	Apr/76	May/76	Feb/76
Site Approved	Jan/76	June/76	no-ran out May/75	Jan/75
Problems/Complaints	no	no	no	no
Topography	flat	flat	raised plane	flat
Soil	sand	sand	sand	sand
Overburden	sand	sand & gravel	sand	sand
Bedrock	Precambrian	Precambrian	Precambrian	Precambrian
Dist. Nearest Watercourse	5000	2500	0'	4000
Surface Water Control	no	no	no	no
Site Affect On S.W.	none	none	contam.	good
Drainage Characteristics	good	good	poor	est 10 ft
Depth to Water Table	20'+	18'	1	2500
Dist. to Nearest Well	2500'	2500	2500	0
No. of wells within 1000 ft..	0	0	0	limited
Site Effect on G.W.	limited	limited	limited	SE
Direction of flow of G.W.	S	W	W	none
Site Sampling Program	none	none	none	no
Analysis Results Available	no	no	no	ok
Surface Water Quality	ok	ok	contam.	ok
Ground Water Quality	ok	ok	ok	ok
Needs further Sampling	yes	no	yes	no
Liner Used	no	no	no	no
Cover Material Adequate	yes	fair	no	no
Drainage Tiles	no	no	no	no
Leachate Collected/Treated	no	no	no	no
Collection/Treatment Plans	no	no	no	no
Leachate Monitoring ok	no	yes	no	yes
LeGrand Rating Number	17.5	17	4	17
Contamination Potential	improbable	improbable	imminent	improbable
Comments	needs monitoring system	good site for monitoring	upgrade or close sample wells,	confine and cover

	A510501-Twp of Georgian Bay Baxter Ward	A510505-Twp of Georgian Bay Freeman Ward	A510601-Twp of Lake of Bays Sinclair Ward
Total Area of Site (ac.)	4.1	5	1
Disposal Are (ac.)	2	5	1
Lifetime of Site (est.)	20 yrs	50	indef.
Domestic Waste (%)	75%	75%	90%
Commercial-Industrial (%)	15%	25%	0
Agricultural-Sewage (%)	10%	0	10%
Total Wastes (tons/wk)	15(est)	4(est)	2(est)
Total Liquids (gal/wk)	0	0	0
Population served	1500	400	200
Consultant's Report	no	no	no
District Officer's Report	Sept/75	Nov/75	June/75
Site Approved	Aug/75	Sept/75	May/75
Problems/Complaints	yes	yes	yes
Topography	rolling	hummocky	ravine
Soil	sand	none	sand
Overburden	sand/muck	none	sand/gravel
Bedrock	precambrian	precambrian	precambrian
Dist. Nearest Watercourse	200	2500	900
Surface Water Control	no	no	no
Site Affect On S.W.	slight	none	slight
Drainage Characteristics	poor	poor	good
Depth to Water Table	3	10'(est)	5'(est)
Dist. to Nearest Well	5000	1500	2500
No. of wells within 1000 ft.	0	0	0
Direction of flow of G.W.	limited	limited	slight
Site Effect on G.W.	E	SE	SW
Site Sampling Program	none	none	none
Analysis Results Available	no	no	no
Surface Water Quality	poor	ok	affected
Ground Water Quality	ok	ok	ok
Needs further Sampling	no	yes	yes
Liner Used	no	no	no
Cover Material Adequate	no	no	no
Drainage Tiles	no	no	no
Leachate Collected/Treated	no	no	no
Collection/Treatment Plans	no	no	no
Leachate Monitoring ok	yes	no	no
LeGrand Rating Number	10	15.5	12
Contamination Potential	possible	improbable	possible
Comments	housekeeping bad	confine, cover, compact,	check stream, start covering..

	A510602 Twp of Lake of Bays McLean Ward	A510604 Twp. of Lake of Bays Franklin Ward	A510605 Twp of Lake of Bays Ridout Ward	A510716 Twp of Muskoka Lakes Medora Ward
Total Area of Site (ac.)	1	1	1/2	80
Disposal Area (ac.)	1	1	1/2	7
Lifetime of Site (est.)	indef.	indef.	indef.	closed
Domestic Waste (%)	95%	100%	95%	90%
Commercial-Industrial (%)	0	0	0	0
Agricultural-Sewage (%)	5%	10%	5%	10%
Total Wastes (tons/wk)	0.5 (est.)	5.0 (est.)	0.5	Closed
Total Liquids (gal/wk)	0	0	0	
Population served	200	2000	200	3700
Consultant's Report	No	No	No	Sept/72
District Officer's Report	Oct/75	Oct/75	Oct/75	May/76
Site Approved	May/75	May/75	May/75	March/76
Problems/Complaints	yes	yes	yes	rolling
Topography	hilly	flat	hilly	none
Soil	sand	sand	none	none
Overburden	sand	sand	none	Precambrian
Bedrock	Precambrian	Precambrian	Precambrian	swamp at toe
Dist. Nearest Watercourse	1000'	50'	500'	none
Surface Water Control	none	none	none	contaminated
Site Affect On S.W.	slight	contaminated	slight	poor
Drainage Characteristics	good	good	poor	7'
Depth to Water Table	(est.) 10'	2'	5'	2500
Dist. to Nearest Well	2500	2600	2500	0
No. of wells within 1000 ft..	0	0	0	limited
Site Effect on G.W.	limited	limited	SW	S
Direction of flow of G.W.	ESE	S	none	none
Site Sampling Program	none	none	no	no
Analysis Results Available	no	no	ok	poor
Surface Water Quality	ok	ok	ok	ok
Ground Water Quality	ok	ok	no	yes
Needs further Sampling	no	yes	no	no
Liner Used	no	no	no	yes
Cover Material Adequate	yes	no	no	no
Drainage Tiles	no	no	no	no
Leachate Collected/Treated	no	no	no	no
Collection/Treatment Plans	no	no	yes	no
Leachate Monitoring ok	yes	no	13	5.5
LeGrand Rating Number	15	5	improbable	probable
Contamination Potential	improbable	probable	improbable	site now closed
Comments	good site	stop burning cover compact	cover or close	



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